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Water Resources Data for Wisconsin Water Year 1972. Part 1. Surface Water Records. Part 2. Water Quality Records

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1973

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1972

Water Resources Data for Wisconsin

Water Year 1972

Part 1. Surface Water Records

Part 2. Water Quality Records

MARCH 3, 1849

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UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT WI-72-1

Prepared in cooperation with the State of Wisconsin
and with other agencies

CALENDAR FOR WATER YEAR 1972

OCTOBER 1971

S	M	T	W	T	F	S
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NOVEMBER 1971

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JANUARY 1972

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FEBRUARY 1972

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MARCH 1972

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APRIL 1972

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MAY 1972

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JUNE 1972

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JULY 1972

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30	31					

AUGUST 1972

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SEPTEMBER 1972

S	M	T	W	T	F	S
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3	4	5	6	7	8	9
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24	25	26	27	28	29	30

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Water resources data for the 1972 water year for Wisconsin consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs. This report contains discharge records for 109 gaging stations; stage and contents for 41 lakes and reservoirs; water quality for 7 gaging stations. Also included are 94 low-flow and 131 crest-stage partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Wisconsin.

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Water Resources Data for Wisconsin

Water Year 1972

Part 1. Surface Water Records

Part 2. Water Quality Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT WI-72-1

Prepared in cooperation with the State of Wisconsin
and with other agencies

Prepared in cooperation with

Wisconsin Department of Natural Resources
Wisconsin Department of Transportation
The University of Wisconsin-Extension
Geological and Natural History Survey
Southeastern Wisconsin Regional Planning Commission
City of Madison

Copies of this report may be obtained from
District Chief, Water Resources Division
U. S. Geological Survey
1815 University Avenue
Madison, Wisconsin 53706

1974

CONTENTS

Page
List of surface-water stations, in downstream order, for which records are published V
List of water-quality stations, in downstream order, for which records are published VIII
Introduction 1
Cooperation 2
Definition of terms 3
Special networks and programs 9
Downstream order and station numbers 9
Surface water records 10
  Collection and computation of data 10
  Accuracy of data 15
  Publications 15
  Other data available 16
Water quality records 16
  Collection and examination of data 16
  Solutes 18
  Temperature 19
  Sediment 19
  Publications 19
Selected references 20
Part 1. Surface water records 23
  Hydrologic conditions 25
Discharge at partial-record stations and miscellaneous sites:
  Low-flow partial-record stations 155
  Crest-stage partial-record stations 162
  Measurements at miscellaneous sites 171
  Low-flow investigations:
    Montreal River basin 176
    West Branch Fond du Lac River basin 176
    East Branch Fond du Lac River basin 177
    DeNevue Creek basin 179
    Neenah Slough basin 180
    Whitewater Creek basin 181
Part 2. Water quality records 182
Analyses of samples collected at miscellaneous sites 219
Analyses of samples collected at water-quality partial-record stations 225
Index 259

ILLUSTRATIONS

Page

Figure 1. Map of Wisconsin showing location of lake and continuous-stream gaging stations..... 24
2. Variation of the 1972 runoff compared with the long-term average runoff.............. 25
3. Comparison of discharge at three long-term representative gaging stations during 1972 water year with median discharge for period 1931-60........................ 26
4. Comparison of extremes of stage of three southern lakes for each water year since 1937............................... 27
5. Comparison of extremes of stage at three northern lakes for each water year since 1937............................... 28
6. Map of Wisconsin showing location of stations where water-quality data were obtained.... 183

TABLES

Table 1. Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter... 6
2. Factors for conversion of sediment concentrations in milligrams per liter to parts per million...................... 6
3. Degrees Celsius (°C) to degrees Fahrenheit (°F)........................... 18

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

Page

ST. LAWRENCE RIVER BASIN (PART 4)

STREAMS TRIBUTARY TO LAKE SUPERIOR

- Bois Brule River at Brule 30
- Iron River:
  - Long Lake near Iron River 31
- Bad River near Mellen 32
- Alder Creek near Upson 33
- Bad River near Odanah 34
  - White River near Ashland 35
- Black River near Bessemer, Mich 36
- Presque Isle River at Marenisco, Mich 37
- Middle Branch Ontonagon River:
  - West Branch Ontonagon River:
    - Cisco Branch Ontonagon River (head of South Branch Ontonagon River) at Cisco Lake Outlet, Mich 38

STREAMS TRIBUTARY TO LAKE MICHIGAN

- Brule River (head of Menominee River) near Florence 39
- Menominee River near Florence 40
  - Pine River:
    - Popple River near Fence 41
  - Pine River below Pine River powerplant, near Florence 42
- Menominee River near Pembine 43
- Menominee River below Koss, Mich 44
- Peshtigo River at Peshtigo 45
- Oconto River:
  - Wheeler Lake near Lakewood 46
- Oconto River near Gillett 47
- Fox River:
  - Montello Creek:
    - Lawrence Creek near Westfield 48
  - Grand River near Kingston 49
- Fox River at Berlin 50
  - Wolf River at Langlade 51
    - Evergreen River:
      - Evergreen Creek near Langlade 52
  - Wolf River at Keshena Falls 53
    - Embarrass River near Embarrass 54
  - Wolf River at New London 55
    - Waupaca River:
      - Crystal River:
        - Emmons Creek near Rural 56
- Lake Winnebago at Oshkosh 57
- Fox River at Rapide Croche Dam, near Wrightstown 58
- Kewaunee River near Kewaunee 59
- Sheboygan River:
  - Unnamed Creek:
    - Cedar Lake near Kiel 60

Page

ST. LAWRENCE RIVER BASIN (PART 4)--Continued
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

Sheboygan River at Sheboygan 61
Milwaukee River at Kewaskum 62
East Branch Milwaukee River near New Fane 63
North Branch Milwaukee River near Fillmore 64
Milwaukee River near Waubeka 65
Milwaukee River at Milwaukee 66
Menomonee River at Wauwatosa 67
Oak Creek at South Milwaukee 68
Root River near Franklin 69
Root River Canal near Franklin 70
Root River at Racine 71
Pike River near Racine 72

UPPER MISSISSIPPI RIVER BASIN (PART 5)
Mississippi River:
ST. CROIX RIVER BASIN
St. Croix River:

St. Croix River near Danbury 73

Yellow River:
Sawyer Creek:

Shell Lake at Shell Lake 74
Snake River near Pine City, Minn 75
St. Croix River at St. Croix Falls 76

CHIPPEWA RIVER BASIN

Chippewa River at Bishops Bridge, near Winter 77
Chippewa River near Bruce 78

Flambeau River:

Pine Creek near Oxbo 79
Flambeau River at Babbs Island, near Winter 80
South Fork Flambeau River near Phillips 81
Flambeau River near Bruce 82
Jump River at Sheldon 83
Chippewa River at Chippewa Falls 84

Red Cedar River:

Red Cedar River near Cameron 85
Hay River at Wheeler 87
Red Cedar River at Menomonie 88
Chippewa River at Durand 89
Eau Galle River at Spring Valley 90
Reservoirs in Chippewa River Basin 91

TREMPEALEAU RIVER BASIN

Trempealeau River at Arcadia 92
Trempealeau River at Dodge 93

BLACK RIVER BASIN

Black River at Neillsville 94
Black River near Galesville 95
Mississippi River at McGregor, Iowa 96

SURFACE-WATER STATIONS IN DOWNSTREAM ORDER

Page

UPPER MISSISSIPPI RIVER BASIN (PART 5)--Continued

WISCONSIN RIVER BASIN

Eagle River:

Anvil Lake near Eagle River........................ 97
Wisconsin River at Rainbow Lake, near Lake Tomahawk.... 98
Tomahawk River at Bradley........................... 99
Spirit River at Spirit Falls........................ 100
Prairie River near Merrill.......................... 101
Wisconsin River at Merrill.......................... 102
Eau Claire River at Kelly........................... 103
Wisconsin River at Rothschild....................... 104
Big Eau Pleine River near Stratford................. 105
Little Plover River near Arnott..................... 106
Little Plover River at Plover....................... 107
Wisconsin River at Wisconsin Rapids................. 108
Tenmile Creek ditch 5 near Bancroft................. 109
Tenmile Creek near Nekoosa.......................... 110
Fourteenmile Creek near New Rome.................... 111
Big Roche a Cri Creek near Adams.................... 112
Yellow River at Babcock............................. 113
Lemonweir River at New Lisbon....................... 114
Hulbert Creek near Wisconsin Dells.................. 115
Dell Creek near Lake Delton......................... 116
Wisconsin River near Wisconsin Dells................ 117

Baraboo River:

Devils Lake near Baraboo............................ 118
Baraboo River near Baraboo.......................... 119
Fish Lake near Sauk City............................ 120

Blue Mound Creek:

Black Earth Creek at Black Earth.................... 121
Otter Creek near Highland........................... 122
Wisconsin River at Muscoda.......................... 123
Kickapoo River at La Farge.......................... 124

Tainter River:

Nederlo Creek:

North Fork Nederlo Creek near Gays Mills............ 125
Nederlo Creek near Gays Mills....................... 126
Kickapoo River at Gays Mills........................ 127
Kickapoo River at Steuben........................... 128
Reservoirs in Wisconsin River Basin................. 129

GRANT RIVER BASIN

Grant River at Burton............................... 132

PLATTE RIVER BASIN

Platte River near Rockville......................... 133

GALENA RIVER BASIN

Galena River at Buncombe............................ 134

ROCK RIVER BASIN

Crawfish River at Milford........................... 135

Yahara River:

Lake Mendota at Madison............................. 136

Page

UPPER MISSISSIPPI RIVER BASIN (PART 5)--Continued
  ROCK RIVER BASIN--Continued
    Lake Monona at Madison.............................. 137
      Murphy Creek:
      Lake Wingra:
        Manitou Way Storm Sewer at Madison............... 138
        Nakoma Storm Sewer at Madison.................... 139
        Lake Wingra Outlet at Madison.................... 140
    Yahara River near McFarland......................... 142
  Rock River at Afton................................... 143
    Turtle Creek near Clinton........................... 144
    Pecatonica River at Darlington...................... 145
      East Branch Pecatonica River near Blanchardville... 146
    Pecatonica River at Martintown...................... 147
      Sugar River near Brodhead......................... 148
  Rock River at Rockton, Ill............................ 149
  ILLINOIS RIVER BASIN
  Kankakee River (head of Illinois River):
    Des Plaines River at Russell, Ill................... 150
  Illinois River:
    Fox River at Waukesha............................... 151
      Honey Creek:
        North Lake near Elkhorn.......................... 152
      Rockland Lake near Burlington...................... 153
    Fox River at Wilmot................................. 154

WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

(Letters after station name designate type of data: (c), chemical; (t), water temperature; (s), sediment)

ST. LAWRENCE RIVER BASIN (PART 4)
  STREAMS TRIBUTARY TO LAKE MICHIGAN
  Popple River near Fence, Wis. (cts).................. 184
  Lake Michigan at Milwaukee (c)....................... 190
UPPER MISSISSIPPI RIVER BASIN (PART 5)
Mississippi River:
  WISCONSIN RIVER BASIN
  Tenmile Creek ditch 5, near Bancroft, Wis. (t)........ 195
  Kickapoo River near Rockton (cts)..................... 197
  Kickapoo River at LaFarge (ts)........................ 204
  Nederlo Creek near Gays Mills (ts).................... 212
  ROCK RIVER BASIN
  Rock River at Afton, Wis. (t)......................... 217

WATER RESOURCES DATA FOR WISCONSIN, 1972

Part 1. Surface-Water Records
Part 2. Water-Quality Records

INTRODUCTION

Water-resources data in this report include records of streamflow, lake stage, and reservoir storage at gaging stations, partial-record stations, miscellaneous sites and chemical and physical characteristics of surface water. Records for a few pertinent gaging stations in bordering States also are included. Locations of gaging stations on streams and lakes are shown in figure 1. Locations of water-quality stations are shown in figure 6. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of C.L.R. Holt, Jr., district chief. Included with these data are that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Wisconsin.

Through September 30, 1960, the records of discharge and stage of streams, and contents and stage of lakes and reservoirs were published in an annual series of U.S. Geological Survey Water-Supply Papers titled "Surface Water Supply of the United States". Streamflow records for 1961-65 are published in a Geological Survey Water-Supply Paper series titled, "Surface Water Supply of the United States 1961-65". The Geological Survey has published records of chemical quality, suspended sediment, and water temperatures since 1941 in an annual series of Water-Supply Papers titled, "Quality of Surface Waters of the United States".

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Beginning with the 1964 water year, water-quality records have been released with streamflow records or in a separate part. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year.

COOPERATION

The U.S. Geological Survey and organizations of the State of Wisconsin have had cooperative agreements for the systematic collection of streamflow records since 1913, and for water-quality records since 1963. Organizations that supplied data are acknowledged in station descriptions.

Organizations that cooperated in collecting records are:

Wisconsin Department of Natural Resources, L. P. Voigt, secretary.

Wisconsin Department of Transportation, N. M. Clapp, secretary, and W. A. Kline, chief bridge engineer.

The University of Wisconsin-Extension, Geological and Natural History Survey, M. E. Ostrom, state geologist and director.

Southeastern Wisconsin Regional Planning Commission, K. W. Bauer, executive director.

City of Madison, D. E. Theobald, city engineer.

Assistance in the form of funds or services was given by:

Department of the Army, Corps of Engineers

St. Paul District	11 gaging stations
Rock Island District	7 gaging stations
Chicago District	4 gaging stations

United States Environmental Protection Agency - 1 quality water station.

The following organizations aided in collecting records:

Wisconsin Valley Improvement Co.
Lake Superior District Power Co.
Wisconsin-Michigan Power Co.
Wisconsin Public Service Corp.
Northern States Power Co.
Dairyland Power Cooperative
Wisconsin Power and Light Co.
Nekoosa-Edwards Paper Co.
Wisconsin River Power Co.
Milwaukee County Park Commission
Milwaukee Water Works, Linwood Avenue Plant

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows:

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons.

Bed material is the shifting portion of fragmented material in the streambed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition, temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria that indicate the sanitary quality of water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed incubation membrane filter method.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from a gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of fluid that passes a given point within a given period of time.

> Mean discharge is the arithmetic average of individual daily mean discharges during a specific period.
>
> Instantaneous discharge is the discharge at a particular instant of time. Where this discharge is used in tables instead of the daily mean, the column heading is "Discharge (cfs)".

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Drainage-area figures include the entire basin area including noncontributing areas unless otherwise noted.

Gage height (G.H.) is the water-surface height referred to an arbitrary datum. Gage height often is used interchangeably with "stage", although gage height is more appropriate when used as a gage reading.

Gaging station is a site on a stream, canal, lake or reservoir where systematic observations of gage height or discharge are obtained. When used with a discharge record, the term applies only to gaging stations having a continuous discharge record.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Methylene blue active substance (MBAS) is a measure of detergents in water. This determination depends on the formation of a blue color when methylene blue dye reacts with snythetic detergent compounds.

Micrograms per liter (ug/l, UG/L) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 6. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 6.

Partial-record station is a site where limited streamflow or water-quality data are collected systematically over a period of years.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the stream water at the time and point of sampling) (Guy, 1969).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distribution given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Iodide (I^{-1}).......	0.00788
Ammonia as NH_4^{+1}...	.05544	Iron (Fe^{+3})*.......	.05372
Barium (Ba^{+2})......	.01456	Lead (Pb^{+2})*.......	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*....	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})...	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*..	.03640
Carbonate (CO_3^{-2})..	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1})....	.02821	Nitrate (NO_3^{-1})....	.01613
Chromium (Cr^{+6})*...	.11539	Nitrite (NO_2^{-1})....	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3})..	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1})....	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1})......	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*..	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2})....	.02082
Hydroxide (OH^{-1})...	.05880	Zinc (Zn^{+2})*.......	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml (grams per milliliter) and a specific gravity of sediment of 2.65.

Picocurie (PC) is a unit for measuring radioactivity equal to 1x10^{-12} Curie. One Curie is equal to that quantity of any radioactive isotope undergoing 3.7 x 10^{10} disintegrations per second.

Runoff in inches (IN.) shows the depth to which the drainage area would be covered if all runoff for a given time period were uniformly distributed.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of sediment in streams are influenced by environmental factors. Some major factors are geology, topography, soil characteristics, land use, and the quantity and intensity of precipitation.

Suspended sediment is the sediment that is maintained in suspension by the upward components of turbulent currents or that is suspended as a colloid.

Suspended-sediment discharge is the rate at which a dry weight of sediment passes a stream section, or it is the dry weight or volume discharged during a time period. It is the product of the instantaneous stream discharge, the concentration (mg/l), and 0.0027.

Suspended-sediment concentration is the velocity-weighted amount of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Sodium adsorption ratio (SAR) expresses the relative activity of sodium ions in exchange reactions with soil and is an index of the sodium or alkali hazard to the soil. This ratio is used to determine the suitability of water for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of water to conduct electric current and is expressed in micromhos per centimeter at 25°C. Because specific conductance is related to the number and types of ions in solution, it can be used to approximate the dissolved-solids content in water. Commonly the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation differs from stream to stream and from well to well; it may even differ with the composition of ions in the water.

Stage-discharge relation is the relation between gage height and the volume of water (per unit of time) flowing in a channel.

Thermograph is a thermometer that continuously records the water temperature on a chart. "Temperature recorder" is the term used to indicate a thermograph or digital mechanism that automatically records water temperatures on paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is the product of the sediment concentration (in mg/l) and 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during 24 hours.

WRD is an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph that refers to published State annual basic-data reports.

WSP is an abbreviation for "Water-Supply Paper".

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin. Index stations are located to provide current streamflow data that are representative of the area. Stream-quality station is part of a network that depicts the area variability of water-quality conditions and detects and assesses long-term changes in stream quality.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

For identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These numbers are in the same downstream order mentioned above. In assigning station numbers no distinction is made between partial-record stations and gaging stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers so that new stations may be established. The complete 8-digit number for each station, such as 05407000 appears just left of the station name and includes the 2-digit part number "05" plus the 6-digit downstream order number "407000". In this report the records are listed in downstream order by parts. The part number refers to an area bounded by certain natural major drainage lines. Records in this report are in Part 4 (St. Lawrence River basin) and Part 5 (Upper Mississippi River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number.

SURFACE-WATER RECORDS

Collection and computation of data

The basic data collected at gaging stations consist of records of stage and measurements of discharge of streams and stage, surface area, and contents of lakes and reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 88, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

Rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharges greater than those measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, and the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in computing discharge. The slope or fall is obtained by means of an auxiliary gage separated from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice and it is impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, considering available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For some gaging stations there are periods without gage-height record or the recorded gage height is faulty. This happens when the recorder stops or fails to operate properly, intakes are plugged, the float is frozen in the well, or for other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with station records from the same or nearby basins.

Data in this report include a general description of the stations and tabulations of daily and monthly figures. A table showing the daily discharge and monthly and yearly discharges is given for gaging stations on streams or canals. A monthly summary table of stage and contents or a table showing the daily contents is given for gaging stations on lakes and reservoirs. Records are published for the water year, which begins October 1 and ends September 30. A calendar for the current water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents) and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year," the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge (or contents), it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS."

Published records of some stations were found to be erroneous, based on data obtained later. Revisions of erroneous records usually are published with the current records in one of the annual or compilation reports. A paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations having published revised records. All reports in which revisions have been published are listed, each followed by the water years for which figures are revised in that report. In listing the water years, only one year is given; for instance, 1965 stands for the period October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge were revised, notations after the dates indicate the following revisions: "(M)" only instantaneous maximum discharge; "(m)" only the instantaneous minimum; and "(P)" only peak discharges. If the drainage area has been revised, the water year is given in which the revised figure was first published. For all stations with published cubic feet per second per square mile and runoff in inches, a revision of the drainage area necessitates revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches, resulting from revised drainage area only, usually are not published in the annual report series.

Skeleton rating tables are published for stream-gaging stations where they are useful and where applicable dates are easily identified.

The daily table for a stream-gaging station gives the discharge corresponding to the daily mean gage height unless large or rapid changes occur in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. Where digital recorders are used, the daily mean discharge is the average discharge at each punched reading. For stations equipped with nonrecording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

A monthly summary is below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM") and in inches (line headed "IN."). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, or if the drainage area includes large noncontributing areas.

In the yearly summary, below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the daily-discharge table are introduced by the word "NOTE". Footnotes indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater, indefinite stage-discharge relation, or other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used to compute discharge for several unusual conditions have been explained.

Peak discharges, their times of occurrence, and the corresponding gage heights for many stations are listed below the yearly summary. All peaks above the selected base are listed. The base discharge, in parentheses, is selected to present about three peaks a year. Peak discharges are not published for canals, ditches, drains, or streams substantially controlled by man. Time of day is expressed in 24-hour local standard time; for example 12:30 a.m. is 0030, and 1:30 p.m. is 1330.

Information for gaging stations on lakes includes a station description and a monthly summary table of stage. Information for reservoir stations includes a description and location paragraph and month-end contents, in millions of cubic feet.

Data collected at partial-record stations and miscellaneous sites are listed in three tables at the end of the surface-water records. The first table is discharge measurements at low-flow partial-record stations, the second is annual maximum stage and discharge at crest-stage stations, and the third is discharge measurements at miscellaneous sites. A fourth table lists measured discharges for low-flow investigations.

Accuracy of Data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge are to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based on the magnitude of the figure. The same rounding rules apply to discharge figures for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to diversion, consumption, storage regulation, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents unless it is so stated. Even where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

Each Water-Supply Paper titled "Surface Water Supply of the United States" has a list of previous Water-Supply Papers containing streamflow information for the area covered by that report. There is also a list of Water-Supply Papers containing detailed information on major floods in the area. Records for stations in Wisconsin for the period October 1960 through September 1965 are in Water-Supply Papers 1911, 1914, and 1915.

Two series of summary reports titled "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 through September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all published records, as well as some records not contained in the annual series of Water-Supply Papers. All records were revised where warranted. Estimated discharges fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the Water-Supply Papers in which daily records were published for that station. Records for stations in Wisconsin are compiled in Water-Supply Papers 1307 and 1308 through September 1950, and in 1727 and 1728 for October 1950 through September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than Water-Supply Papers. Information relative to these reports may be obtained from the district office.

Other data available

More detailed information than that published for most gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form, and many statistical analyses have been made.

WATER QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used with the computations of the chemical constituents and sediment loads in this report.

Description of water-quality stations located at or near streamflow stations include location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks. The format is similar to that used for streamflow gaging stations.

Water-quality information includes chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of dissolved constituents and certain properties of characteristics such as hardness, sodium adsorption ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations with a continuous temperature recorder from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations, and particle-size distribution of suspended sediment and bed material.

Before the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm), and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/l), and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per millititer), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperatures in degrees Celsius are converted to Fahrenheit in table 3, page 18.

In October 1968, the Geological Survey began reporting many chemical constituents and minor elements in micrograms per liter. (See "Definition of Terms," p. 4.)

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F -32) or °F = 9/5 (°C) + 32.

Solutes

Methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the water. Some streams must be sampled at several verticals across the channel to determine accurately the solute load.

Temperature

Water temperatures are measured at most water-quality stations. Large streams have a small diurnal temperature change; small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-head discharges.

Records at stations having continuously recording thermographs include maximum and minimum daily temperatures and monthly averages.

Sediment

Suspended-sediment concentrations are determined from samples collected with depth-integrating samplers. Samples usually are obtained at a single vertical in the cross-section. During periods of high or rapidly changing flow, samples are taken twice or more throughout the day at many stations. Suspended-sediment samples are collected periodically at all stations. Although such data may represent conditions only at the time of collection, they are useful in establishing relations between sediment discharge and streamflow. These relations are used to predict long-term sediment-discharge characteristics for the stream.

In addition to the records of the quantities of suspended sediment, records of periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

For days of high flow, sediment discharges may not represent actual sediment transport because a sufficient number of samples were not collected to accurately define mean sediment concentration for the day.

Publications

The annual series of water-supply papers that contain information on quality of surface waters in Wisconsin are listed on the following page.

Parts 3 and 4

Water year	WSP No.	Water year	WSP No.	Water year	WSP No.	Water year	WSP No.
1941	942	1948	1132	1955	1400	1962	1942
1942	950	1949	1162	1956	1450	1963	1948
1943	970	1950	1186	1957	1520	1964	1955
1944	1022	1951	1197	1958	1571	1965	1962
1945	1030	1952	1250	1959	1642	1966	1992
1946	1050	1953	1290	1960	1742	1967	2012
1947	1102	1954	1350	1961	1882		

Parts 5 and 6

Water year	WSP No.	Water year	WSP No.	Water year	WSP No.	Water year	WSP No.
1941	942	1948	1132	1955	1401	1962	1943
1942	950	1949	1162	1956	1451	1963	1949
1943	970	1950	1187	1957	1521	1964	1956
1944	1022	1951	1198	1958	1572	1965	1963
1945	1030	1952	1251	1959	1643	1966	1993
1946	1050	1953	1291	1960	1743	1967	2013
1947	1102	1954	1351	1961	1883		

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PART 1. SURFACE WATER RECORDS

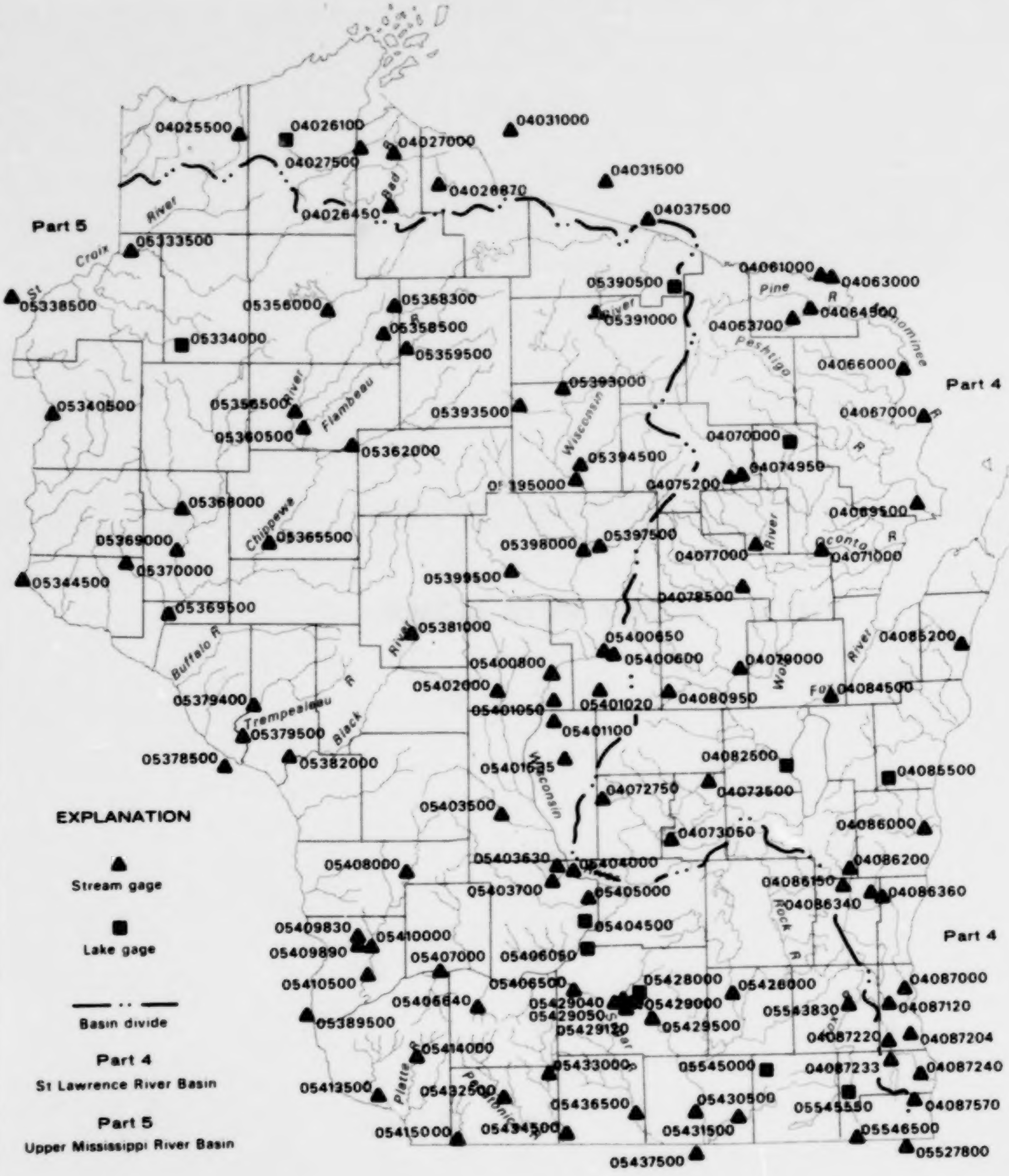

Figure 1. Map of Wisconsin showing location of lake and continous stream-gaging stations

HYDROLOGIC CONDITIONS

Runoff in Wisconsin for the water year ending Sept. 30, 1972, was above normal for most streams. Only in a small area in the south was runoff below normal (see figure 2). In the southeast corner of the state yearly runoff was considerably above normal.

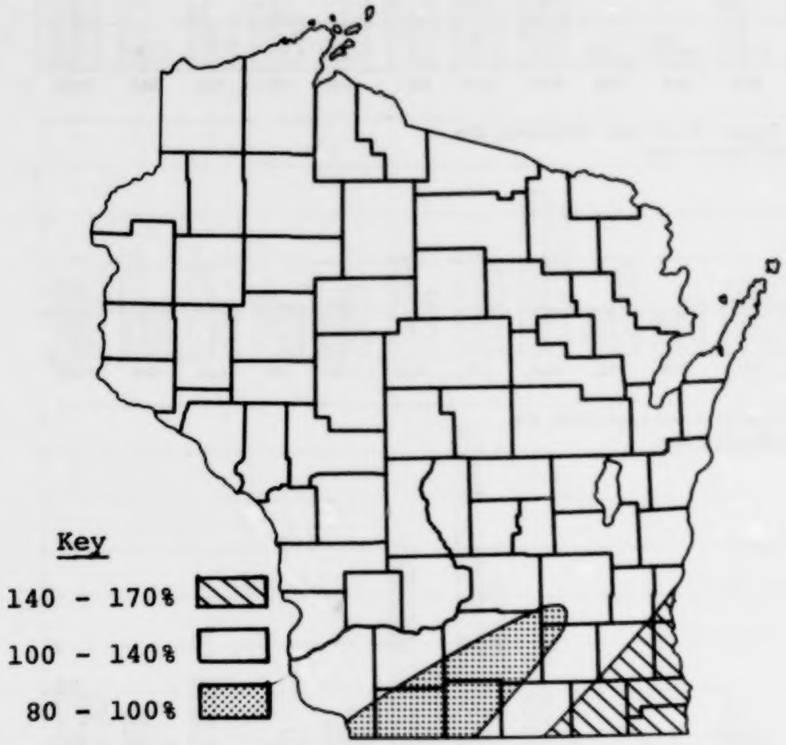

Figure 2. Variation of 1972 runoff compared with long-term average runoff.

The water year began with streamflow in the normal range in the southern part of Wisconsin and slightly above normal in the rest of the state. Streamflow seasonally declined after the spring high flows until substantial rainfall in July, August, and September increased flows into the excessive range. In east and southeastern Wisconsin maximum discharges for the year occurred in September for many streams. Some localized minor flooding occurred during the latter part of the water year.

Figures 4 and 5 show extremes of stage during the water year 1972 for selected lakes.

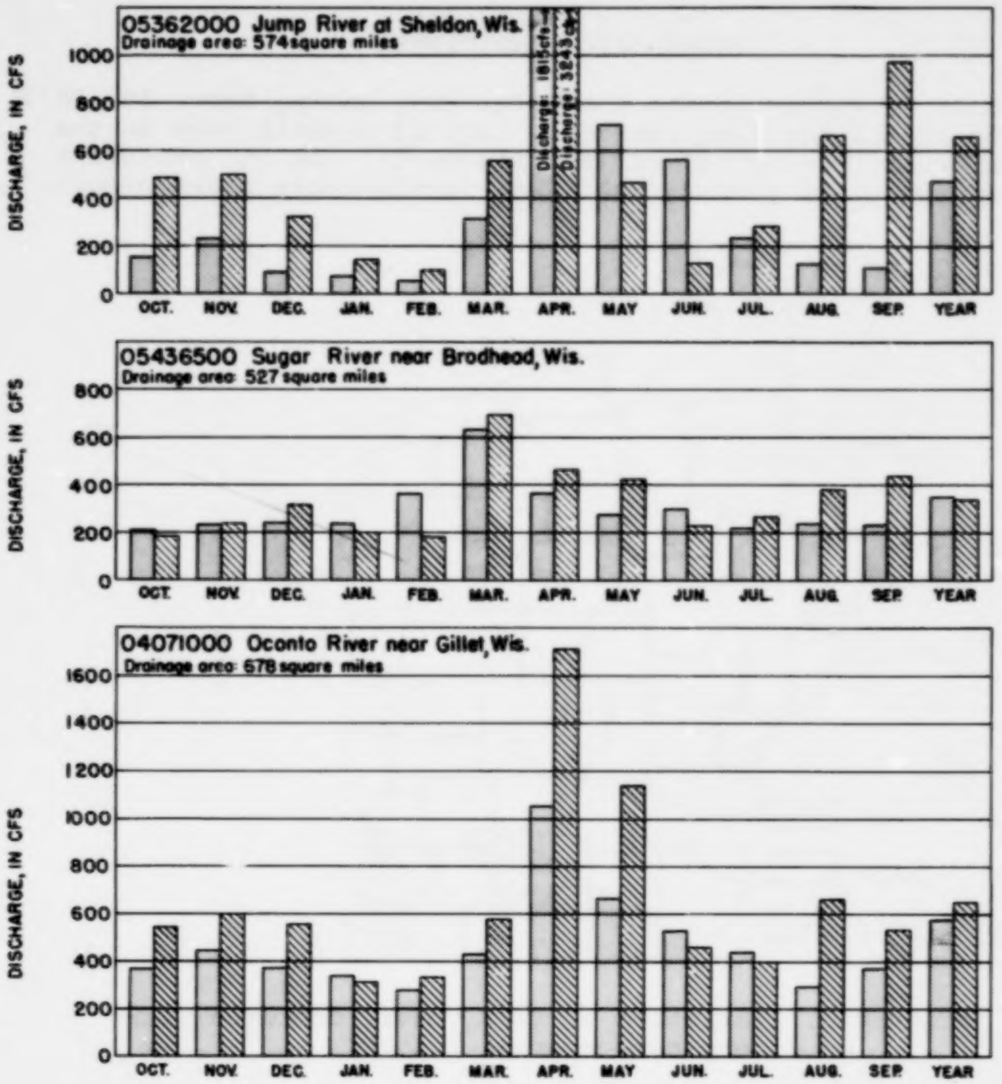

Figure 3. Comparison of discharge at three long-term representative gaging stations during 1972 water year with median discharge for period 1931-60.

▭ Median of monthly and yearly mean discharge for period 1931-60

▨ Monthly and yearly mean discharge for 1972 water year.

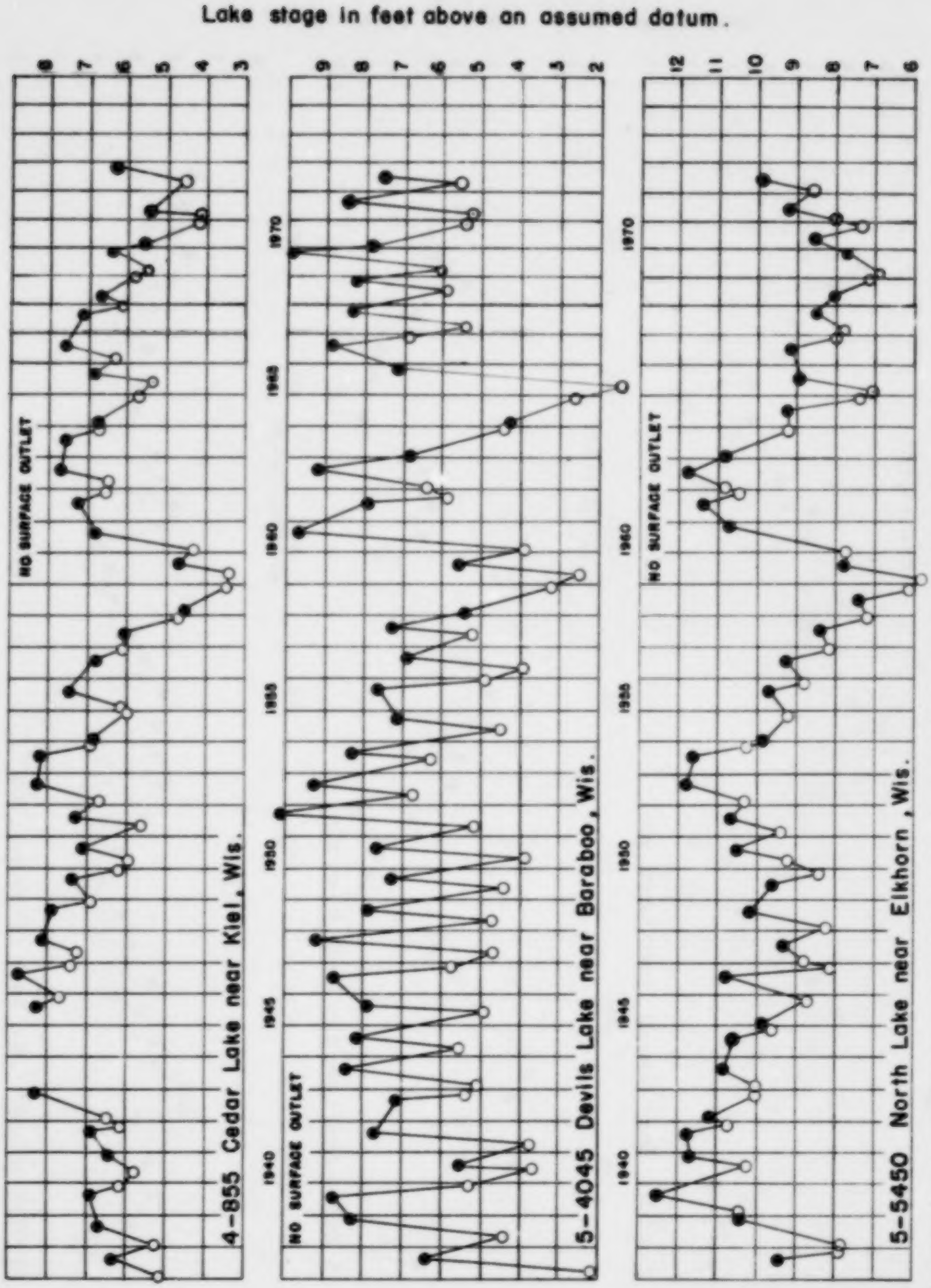

Figure 4. A comparison of extremes of stage of three southern lakes for each water year since 1937.

● Maximum stage observed ○ Minimum stage observed Connecting lines do not indicate actual stage between extremes.

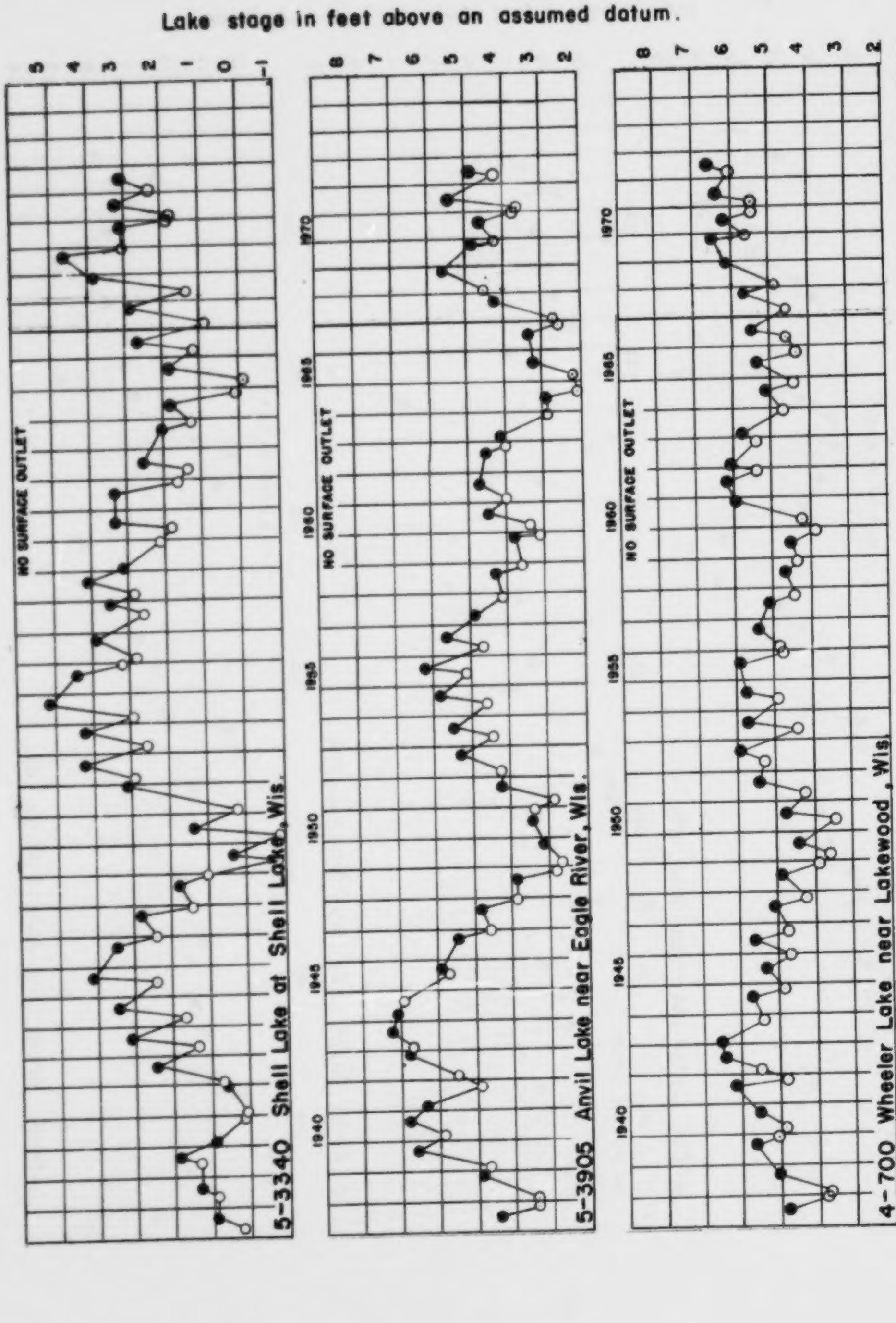

Figure 5. A comparison of extremes of stage of three northern lakes for each water year since 1937.

● Maximum stage observed. ○ Minimum stage observed. Connecting lines do not indicate actual stage between extremes.

04025500 Bois Brule River at Brule, Wis.

LOCATION.--Lat 46°32'16", long 91°35'43", in NW 1/4 SW 1/4 sec.23, T.47 N., R.10 W., Douglas County, on right bank, 1.4 miles southwest of Brule Post Office, 1.4 miles downstream from Nebagamon Creek, and 1.7 miles upstream from Little Brule River.

DRAINAGE AREA.--120 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Prior to January 1943 monthly discharge only, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 948.49 ft above mean sea level. Prior to October 1964, nonrecording gage at same site and datum supplemented by water-stage recorder part of 1959-62.

AVERAGE DISCHARGE.--30 years, 171 cfs (19.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 822 cfs Apr. 20 (gage height, 4.05 ft); minimum, 140 cfs Apr. 8 (gage height, 1.60 ft).

Period of record: Maximum discharge, 1,520 cfs June 5, 1944 (gage height, 5.2 ft, from graph based on gage readings) from rating curve extended above 750 cfs; minimum observed, 67 cfs Mar. 13, 1943.

REMARKS.--Records good except those for winter periods, which are fair.

REVISIONS (WATER YEARS).--WSP 1207: Drainage area. WSP 1337: 1943(M), 1944, 1945-50(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 27 to Nov. 18, Sept. 19-23; stage-discharge relation affected by ice Dec. 12 to Mar. 19.)

1.4	111	3.0	443
2.0	214	4.0	812
		4.4	1,010

DISCHARGE, IN CUBIC FE[illegible] PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	442	226	160	160	150	173	414	208	214	229	195
2	230	429	216	150	150	160	172	458	195	196	219	186
3	231	400	210	150	150	160	173	431	185	202	212	178
4	213	367	210	150	150	160	171	405	179	195	204	177
5	202	337	210	150	150	160	169	390	175	184	195	175
6	201	306	210	150	150	160	169	417	171	176	199	177
7	190	275	210	150	150	170	168	373	170	171	199	187
8	182	255	210	150	150	170	167	352	168	168	221	180
9	174	240	210	150	150	160	168	330	165	168	209	171
10	170	232	210	160	150	160	172	307	162	164	200	167
11	165	225	210	160	160	160	182	287	162	168	207	166
12	162	217	200	160	150	160	194	270	167	166	194	161
13	166	210	210	150	150	160	225	259	168	161	187	165
14	164	209	230	150	150	160	223	256	182	160	178	160
15	160	209	220	150	150	150	246	248	178	157	184	156
16	234	230	210	150	150	150	308	240	170	153	299	156
17	267	331	190	150	150	150	349	231	162	151	475	154
18	260	430	210	150	150	150	383	222	160	153	372	152
19	269	411	230	160	150	160	463	213	170	151	308	150
20	247	380	260	160	150	164	623	205	259	228	303	202
21	259	349	270	160	160	186	658	207	238	267	287	270
22	263	320	230	150	150	187	558	206	221	475	346	252
23	247	292	190	150	150	179	500	195	204	580	291	226
24	234	276	180	150	150	173	496	186	189	454	269	209
25	221	266	180	150	150	172	492	181	180	395	258	195
26	211	256	180	150	150	171	496	178	174	350	239	189
27	335	249	170	150	150	171	498	178	197	318	236	185
28	433	242	170	150	150	171	484	176	236	295	230	183
29	376	236	160	150	150	171	454	217	246	272	221	181
30	415	229	160	150	------	173	421	239	234	255	212	177
31	494	------	160	150	------	172	------	223	------	245	204	------
TOTAL	7,564	8,850	6,342	4,720	4,380	5,100	9,955	8,494	5,675	7,392	7,587	5,482
MEAN	244	295	205	152	151	165	332	274	189	238	245	183
MAX	494	442	270	160	160	187	658	458	259	580	475	270
MIN	160	209	160	150	150	150	167	176	160	151	178	150
CFSM	2.03	2.46	1.71	1.27	1.26	1.38	2.77	2.28	1.58	1.98	2.04	1.53
IN.	2.34	2.74	1.97	1.46	1.36	1.58	3.09	2.63	1.76	2.29	2.35	1.70

CAL YR 1971 TOTAL 71,864 MEAN 197 MAX 766 MIN 121 CFSM 1.64 IN 22.28
WTR YR 1972 TOTAL 81,541 MEAN 223 MAX 658 MIN 150 CFSM 1.86 IN 25.28

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-27	2200	3.29	497	4-20	2200	4.05	822
10-31	0200	3.40	519	7-23	0400	3.59	636
11-18	0800	3.12	443	8-17	0300	3.21	497

04026100 Long Lake near Iron River, Wis.

LOCATION.--Lat 46°35'05", long 91°20'33", in SW 1/4 sec.35, T.48 N., R.8 W., Bayfield County, at residence of Melvin C. Platt, east side of lake, 3.6 miles northeast of Iron River.

DRAINAGE AREA.--1.28 sq mi. Area of Long Lake, 184 acres.

PERIOD OF RECORD.--October 1964 to current year (fragmentary).

GAGE.--Nonrecording gage. Altitude of gage is 1,096 ft (from topographic map).

EXTREMES.--Current year: Maximum gage height observed, 3.65 ft Sept. 27; minimum observed, 2.63 ft Oct. 4.
Period of record: Maximum gage height observed, 3.65 ft Sept. 27, 1972; minimum observed, 1.39 ft Aug. 28, 1968.

REMARKS.--Lake has no surface outlet. Lake ice covered from Nov. 13 to May 3.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2	2.64											
3									3.44			
4	2.63			3.03								
5												
6		2.80										
7					3.15							
8									3.31			
9	2.64	2.75										
10									3.30			
11												
12												
13		2.74										
14												
15												
16	2.66											
17									3.33			
18							3.34					
19												
20												3.48
21												
22												
23	2.66											
24									3.30			
25												
26												
27								3.38				3.65
28												
29									3.30			
30	2.70				------			3.44				3.60
31		------			------		------		------			------

04026450 Bad River near Mellen, Wis.

LOCATION.--Lat 46°16'14", long 90°42'26", in NE 1/4 NW 1/4 sec.26, T.44 N., R.3 W., Ashland County, Chequamegon National Forest, on left bank 150 ft downstream from bridge on U.S. Forest Service Road 184, 250 ft downstream from Iron River and 4.4 miles southwest of Mellen.

DRAINAGE AREA.--83.4 sq mi.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,390 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,130 cfs July 23 (gage height, 7.61 ft); minimum, 14 cfs June 13 (gage height, 0.87 ft).

Period of record: Maximum discharge, 2,130 cfs July 23, 1972 (gage height, 7.61 ft); minimum, 8.2 cfs Aug. 8, 9, 13, 1971 (gage height, 0.70 ft).

REMARKS.--Records good except those for winter periods and period of no gage-height record, which are poor.

Rating table, except period of no gage-height record, (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Apr. 13-19.)

0.9	15	3.0	330
1.1	26	4.0	599
1.5	59	6.0	1,340
2.0	123	8.0	2,340

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	184	66	27	22	20	43	632	69	137	95	97
2	97	213	62	27	22	20	43	641	50	94	78	80
3	118	243	58	26	22	20	43	584	41	72	73	69
4	112	191	55	26	22	20	43	471	33	66	62	62
5	90	154	52	26	22	19	44	386	30	54	53	57
6	84	126	50	26	22	19	44	399	30	42	44	53
7	86	97	48	25	22	19	44	379	26	34	45	68
8	97	78	46	25	21	19	45	312	23	29	106	65
9	75	68	44	25	21	19	45	245	21	26	126	56
10	70	63	42	25	21	19	45	187	16	26	93	49
11	63	59	40	25	21	20	46	153	21	23	100	44
12	55	56	39	25	21	20	51	128	18	22	99	46
13	52	53	38	25	21	20	56	112	15	20	79	47
14	54	52	37	24	21	21	62	106	93	20	63	44
15	54	57	36	24	21	22	78	104	94	18	67	39
16	49	63	35	24	21	23	151	94	62	17	542	41
17	52	132	34	24	21	24	275	89	44	20	1,820	38
18	54	279	33	24	21	25	389	80	31	75	1,220	36
19	53	318	32	24	20	27	407	64	33	72	767	31
20	56	279	31	24	20	28	557	51	468	154	578	50
21	45	220	31	24	20	29	673	47	551	372	673	169
22	44	201	31	23	20	30	617	44	417	1,590	695	99
23	43	145	30	23	20	32	536	39	272	2,040	557	76
24	39	126	30	23	20	33	457	34	162	1,420	174	77
25	40	114	29	23	20	35	438	31	106	858	318	132
26	43	100	29	23	20	36	498	31	79	503	245	135
27	48	93	29	23	20	38	611	30	66	312	199	135
28	61	85	28	23	20	39	712	29	142	215	167	123
29	61	79	28	22	20	41	770	42	266	171	153	174
30	99	72	28	22	------	42	708	111	209	137	110	165
31	201	------	27	22	------	43	------	93	------	108	97	------
TOTAL	2,144	4,000	1,198	752	605	822	8,531	5,748	3,488	8,747	9,498	2,350
MEAN	69.2	133	38.6	24.3	20.9	26.5	284	185	116	282	306	78.3
MAX	201	318	66	27	22	43	770	641	551	2,040	1,820	174
MIN	39	52	27	22	20	19	43	29	15	17	44	31
CFSM	.83	1.59	.46	.29	.25	.32	3.41	2.22	1.39	3.38	3.67	.94
IN.	.96	1.78	.53	.34	.27	.37	3.81	2.56	1.56	3.90	4.24	1.05

CAL YR 1971 TOTAL 38,647.0 MEAN 106 MAX 1,345 MIN 9.1 CFSM 1.27 IN 17.24
WTR YR 1972 TOTAL 47,883.0 MEAN 131 MAX 2,040 MIN 15 CFSM 1.57 IN 21.36

NOTE.--No gage-height record Dec. 3 to Apr. 12.

04026870 Alder Creek near Upson, Wis.

LOCATION.--Lat 46°23'09", long 90°24'30", in SE 1/4 SE 1/4 sec. 7, T.45 N., R.1 E., Iron County, on right bank 10 ft upstream from State Highway 122 bridge and 1.0 mile north of Upson.

DRAINAGE AREA.--22.3 sq mi.

PERIOD OF RECORD.--April 1972 to current year

GAGE.--Water-stage recorder. Datum of gage is 1,380.24 ft above mean sea level. Prior to May 16, 1972, nonrecording gage at same site and datum.

EXTREMES.--April to September 1972: Maximum discharge during period, 663 cfs Aug. 17 (gage height, 7.29 ft); minimum, 4.0 cfs Sept. 16.

REMARKS.--Records fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second).

Apr. 1 to Aug. 17

3.1	3.5	4.5	78
3.4	9.3	5.0	140
3.7	19	6.0	320
4.1	42	7.1	605

Aug. 18 to Sept. 30

3.3	4.6	3.7	17
3.5	9.7	3.9	28

Note.--same as preceding table above 3.9 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							25	222	26	39	13	7.2
2							25	205	15	20	10	6.2
3							25	148	11	13	9.3	5.3
4							25	98	8.4	12	8.2	4.6
5							25	69	7.8	9.8	6.9	4.4
6							25	70	7.8	6.7	6.7	5.1
7							26	74	7.1	7.8	6.3	6.7
8							27	86	6.3	6.7	8.4	6.7
9							31	44	5.5	6.5	9.8	6.2
10							35	30	5.1	6.3	9.3	5.3
11							40	24	4.8	5.7	12	4.8
12							50	16	4.8	5.5	13	4.4
13							67	17	5.3	5.1	11	4.8
14							75	18	19	5.1	9.1	4.8
15							88	18	22	4.9	8.4	4.4
16							117	16	16	4.5	155	5.3
17							102	15	11	4.8	605	6.2
18							276	14	8.6	7.8	324	5.3
19							420	12	14	8.2	137	5.8
20							458	11	174	14	64	6.0
21							430	11	245	33	44	12
22							237	12	136	136	42	14
23							237	10	58	268	41	10
24							158	9.1	24	202	38	8.6
25							124	8.0	15	98	33	9.1
26							154	7.1	11	44	26	17
27							243	6.5	12	24	21	21
28							377	7.5	28	19	15	21
29							422	9.6	53	21	12	24
30					------		340	34	63	21	9.4	16
31		------			------		------	41	------	17	7.7	------
TOTAL							4,684	1,362.8	1,024.5	1,076.4	1,715.5	262.2
MEAN							156	44.0	34.2	34.7	55.3	8.74
MAX							458	222	245	268	605	24
MIN							25	6.5	4.8	4.5	6.3	4.4
CFSM							7.00	1.97	1.53	1.56	2.48	.39
IN.							7.81	2.27	1.71	1.80	2.86	.44

04027000 Bad River near Odanah, Wis.

LOCATION.--Lat 46°29'15", long 90°41'45", in SE 1/4 sec.2, T.46 N., R.3 W., Ashland County, on left bank just downstream from Elm Hoist Bridge, 5.0 miles downstream from Potato River, 8.5 miles south of Odanah, and 23 miles from mouth.

DRAINAGE AREA.--611 sq mi.

PERIOD OF RECORD.--July 1914 to December 1922 (monthly discharge only for some periods published in WSP 1307), May 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 668.30 ft above mean sea level. May 17, 1948, to Nov. 6, 1959, and Oct. 19, 1960, to Nov. 23, 1961, water-stage recorder. Nov. 7, 1959, to Oct. 18, 1960, and Nov. 24, 1961, to July 12, 1962, nonrecording gage. Prior to Nov. 11, 1922, water-stage recorder at site 2 miles downstream at different datum.

AVERAGE DISCHARGE.--32 years (1914-22, 1948-72), 611 cfs (13.58 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,250 cfs July 23 (gage height, 12.10 ft); minimum daily, 140 cfs Feb. 19 to Mar. 10.

Period of record: Maximum discharge, 27,700 cfs Apr. 24, 1960 (gage height, 21.7 ft from floodmarks), from rating curve extended above 12,000 cfs and comparison with contracted-opening measurement of peak flow (45,600 cfs) at Odanah, drainage area approximately 970 sq mi; minimum 49 cfs Aug. 8, 1964 (gage height, 2.03 ft).

Flood of June 24, 1946, reached a stage of at least 22.2 ft (top of bridge submerged), information from Indian Service.

REMARKS.--Records good except those for winter periods, which are fair.

REVISIONS (WATER YEARS).--WSP 1207: Drainage area. WSP 1337: 1922.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Aug. 16-25; stage-discharge relation affected by ice Nov. 30 to Apr. 15.)

2.0	40	6.0	2,260
2.5	174	9.0	5,000
3.0	336	11.0	7,600
4.0	830	13.0	10,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	1,050	400	200	170	140	550	3,720	580	692	520	520
2	515	1,190	390	190	170	140	530	3,860	433	505	428	485
3	985	1,240	390	190	170	140	520	3,410	336	398	385	424
4	714	1,000	390	190	170	140	520	2,610	275	336	336	368
5	560	830	380	190	170	140	520	2,030	236	282	292	344
6	490	692	380	180	170	140	540	2,180	218	252	265	336
7	495	565	360	180	170	140	560	2,070	209	224	249	348
8	510	520	340	170	170	140	580	1,680	200	197	282	385
9	470	456	320	170	170	140	620	1,380	185	188	402	368
10	410	402	300	170	170	140	640	1,130	171	186	385	329
11	376	380	280	170	160	150	710	932	157	186	447	310
12	329	364	260	170	160	160	850	808	152	168	515	282
13	303	340	250	170	160	170	1,070	720	157	157	419	285
14	282	321	250	170	160	180	1,400	655	221	152	344	325
15	272	318	240	180	150	200	1,700	630	465	152	299	285
16	282	325	240	180	150	210	3,510	580	376	149	2,850	275
17	442	742	240	190	150	220	5,190	515	299	141	6,430	275
18	426	2,410	250	190	150	240	5,280	456	249	154	6,620	272
19	369	2,200	250	200	140	280	4,010	402	227	249	5,250	239
20	356	1,600	260	190	140	300	4,990	368	1,830	325	3,840	239
21	336	1,270	270	190	140	340	5,720	360	2,540	956	4,140	580
22	318	956	280	190	140	370	4,800	352	1,880	4,940	2,950	625
23	306	920	290	190	140	400	4,030	314	1,260	8,680	2,630	550
24	289	768	280	190	140	450	3,160	272	986	7,500	1,800	406
25	275	720	270	180	140	490	2,770	236	1,270	4,480	1,430	356
26	262	590	270	180	140	520	3,090	212	565	2,340	1,130	442
27	255	535	250	180	140	570	3,460	200	348	1,490	1,040	610
28	321	440	240	170	140	590	4,730	194	495	1,110	896	560
29	399	415	230	170	140	590	5,280	215	872	998	753	610
30	479	410	210	170	------	580	4,600	726	974	786	630	660
31	1,260	------	200	170	------	550	------	764	------	630	545	------
TOTAL	13,311	24,039	8,970	5,610	4,480	8,970	76,460	33,981	18,167	39,003	48,502	12,093
MEAN	429	801	289	181	154	289	2,549	1,096	606	1,258	1,565	403
MAX	1,260	2,410	400	200	170	590	5,720	3,860	2,540	8,680	6,620	660
MIN	255	318	200	170	140	140	520	194	152	141	249	239
CFSM	.70	1.31	.47	.30	.25	.47	4.17	1.79	.99	2.06	2.56	.66
IN.	.81	1.46	.55	.34	.27	.55	4.66	2.07	1.11	2.37	2.95	.74

CAL YR 1971 TOTAL 254,624 MEAN 698 MAX 10,100 MIN 95 CFSM 1.14 IN 15.50
WTR YR 1972 TOTAL 293,586 MEAN 802 MAX 8,680 MIN 140 CFSM 1.31 IN 17.87

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-18	0400	9.65	5,780	7-23	1800	12.10	9,250
4-21	0600	9.94	6,140	8-18	2200	11.25	7,280
4-29	1200	9.41	5,490				

04027500 White River near Ashland, Wis.

LOCATION.--Lat 46°29'50", long 90°54'15", in NE 1/4 sec.6, T.46 N., R.4 W., Ashland County, at downstream end of powerplant of Lake Superior District Power Co., 0.3 mile downstream from bridge on State Highway 112 over dam, and 4.5 miles south of Ashland city limits.

DRAINAGE AREA.--279 sq mi.

PERIOD OF RECORD.--May 1948 to current year.

GAGE.--Nonrecording gage. Datum of gage is 660.15 ft above mean sea level (Lake Superior District Power Co. bench mark).

AVERAGE DISCHARGE.--24 years, 289 cfs (14.07 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,050 cfs Aug. 20 (gage height, 6.80 ft); minimum observed, 92 cfs Dec. 13 (gage height, 0.74 ft); minimum daily, 92 cfs Dec. 13.

Period of record: Maximum discharge, 6,270 cfs July 1, 1953 (gage height, 7.90 ft) from rating curve extended above 3,000 cfs; minimum, 3.1 cfs Apr. 28-30, 1949 (gage height, 0.09 ft).

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Diurnal fluctuation caused by powerplant at gage.

REVISIONS.--WSP 1207: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 3 to Mar. 20.)

0.7	84	2.0	585
.8	104	3.0	1,270
.9	129	4.0	2,160
1.0	158	5.0	3,160
1.5	343	6.8	5,050

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	397	227	204	160	150	388	348	300	250	282	299
2	352	585	185	240	160	150	482	585	270	220	220	299
3	361	580	224	200	160	150	537	507	240	200	210	234
4	343	507	227	170	160	150	366	564	220	190	220	260
5	325	463	256	140	160	150	325	507	217	191	224	227
6	265	411	238	160	160	150	434	670	217	265	210	245
7	256	325	238	200	160	150	356	472	210	191	207	265
8	256	290	238	200	160	150	453	448	207	188	207	317
9	201	245	238	200	160	150	440	439	207	191	265	282
10	220	249	238	200	160	150	430	374	207	190	207	242
11	217	238	204	200	150	150	420	343	198	191	210	252
12	188	238	152	200	150	150	411	320	191	170	290	242
13	173	238	92	150	150	150	497	300	240	170	260	234
14	176	238	158	170	150	150	527	290	350	170	198	245
15	173	238	242	180	150	150	532	270	290	170	227	238
16	194	238	234	190	150	160	1,470	250	260	170	1,080	217
17	429	630	234	190	150	160	1,450	250	230	170	1,820	220
18	388	830	170	190	150	170	1,690	240	210	170	1,780	234
19	370	653	176	190	150	190	1,560	230	194	190	1,810	260
20	312	653	201	190	150	220	1,650	230	719	220	4,100	217
21	269	670	214	190	150	250	1,160	230	507	500	1,620	388
22	256	477	220	190	150	280	1,110	220	558	2,960	1,870	317
23	242	402	204	180	150	310	954	220	444	2,310	940	317
24	242	361	224	170	150	350	864	220	321	1,270	919	312
25	231	334	207	170	150	380	817	220	270	1,690	817	295
26	220	290	194	170	150	400	954	240	230	1,150	682	330
27	234	282	182	160	150	420	653	260	238	864	596	256
28	453	238	185	160	150	420	624	300	343	585	502	252
29	402	249	188	160	150	420	817	360	366	434	416	234
30	512	201	185	160	------	430	558	420	330	330	361	245
31	830	------	217	160	------	420	------	366	------	224	308	------
TOTAL	9,294	11,750	6,392	5,634	4,450	7,230	22,929	10,693	8,784	16,184	23,058	7,975
MEAN	300	392	206	182	153	233	764	345	293	522	744	266
MAX	830	830	256	240	160	430	1,690	670	719	2,960	4,100	388
MIN	173	201	92	140	150	150	325	220	191	170	198	217
CFSM	1.08	1.41	.74	.65	.55	.84	2.74	1.24	1.05	1.87	2.67	.95
IN.	1.24	1.57	.85	.75	.59	.96	3.06	1.43	1.17	2.16	3.07	1.06

CAL YR 1971 TOTAL 104,557 MEAN 286 MAX 2,540 MIN 92 CFSM 1.03 IN 13.94
WTR YR 1972 TOTAL 134,373 MEAN 367 MAX 4,100 MIN 92 CFSM 1.32 IN 17.92

NOTE.--No gage-height record Jan. 16 to Mar. 31, June 30 to July 30.

04031000 Black River near Bessemer, Mich.

LOCATION.--Lat 46°30'41", long 90°04'28", in NE 1/4 SE 1/4 sec.32, T.48 N., R.46 W., Gogebic County, on right bank 450 ft downstream from bridge on county highway, 500 ft downstream from Powder Mill Creek, and 2.5 miles northwest of Bessemer.

DRAINAGE AREA.--200 sq mi.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,150 ft (from topographic map).

AVERAGE DISCHARGE.--18 years, 235 cfs (15.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,360 cfs Aug. 16 (gage height, 11.73 ft); minimum daily, 33 cfs Mar. 2, 3; minimum gage height, 0.78 ft July 16.

Period of record: Maximum discharge, 14,800 cfs Apr. 24, 1960 (gage height, 14.27 ft, from floodmark), from rating curve extended above 5,300 cfs on basis of slope-area measurement of peak flow; minimum, 7.8 cfs Sept. 9, 1970 (gage height, 0.36 ft).

REMARKS.--Records good except those for winter periods, which are poor. Prior to 1967, some ground water pumped from mines at Bessemer.

REVISIONS.--WSP 1911: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	267	160	54	37	34	72	2.240	238	447	120	166
2	156	338	150	52	37	33	72	1.990	186	330	100	139
3	135	356	145	50	37	33	72	1.470	151	248	95	125
4	105	332	135	48	37	34	72	1.100	115	205	75	115
5	94	341	130	46	37	35	72	842	97	158	63	117
6	115	332	120	45	37	36	72	876	85	126	60	108
7	125	252	115	44	37	38	72	734	73	103	78	124
8	133	231	110	42	37	39	73	594	65	85	101	107
9	131	195	110	40	37	40	76	481	54	74	112	90
10	137	182	110	39	36	40	80	382	46	64	86	85
11	121	174	120	38	36	40	68	333	42	57	96	80
12	103	166	130	37	36	40	110	288	47	50	95	72
13	102	155	160	37	36	40	150	253	51	43	80	80
14	100	152	145	36	36	40	250	227	120	42	71	81
15	93	170	130	36	36	41	406	204	160	38	70	73
16	94	174	120	35	36	42	733	184	132	38	5.830	67
17	105	320	115	35	36	43	1.120	163	113	52	3.630	80
18	103	558	105	35	36	45	1.380	145	94	130	1.800	77
19	113	539	100	35	36	46	1.380	125	84	112	1,090	66
20	111	461	95	35	36	49	1.880	110	831	155	721	85
21	104	403	90	35	36	56	2.110	98	915	229	530	213
22	109	357	85	35	36	66	1.770	88	591	635	624	221
23	106	330	82	36	36	84	1.460	80	416	886	503	193
24	100	290	78	36	36	96	1.210	69	307	737	468	165
25	97	251	74	36	36	100	1.280	61	229	539	443	146
26	95	226	70	36	36	94	1.710	54	177	390	336	316
27	102	208	67	36	36	85	2.280	54	199	294	282	333
28	120	192	64	36	36	78	2.840	63	617	236	227	354
29	108	185	62	36	35	74	3.180	138	729	208	187	530
30	167	170	59	36	------	72	2.800	389	587	163	156	481
31	330	------	57	36	------	72	------	309	------	152	155	------
TOTAL	3.677	8.307	3.293	1.213	1.052	1.665	28.870	14.144	7.551	7.026	18.284	4.889
MEAN	119	277	106	39.1	36.3	53.7	962	456	252	227	590	163
MAX	330	558	160	54	37	100	3.180	2.240	915	886	5.830	530
MIN	63	152	57	35	35	33	72	54	42	38	60	66
CFSM	.60	1.39	.53	.20	.18	.27	4.81	2.28	1.26	1.14	2.95	.82
IN.	.68	1.55	.61	.23	.20	.31	5.37	2.63	1.40	1.31	3.40	.91

CAL YR 1971 TOTAL 97.673 MEAN 268 MAX 4.860 MIN 18 CFSM 1.34 IN 18.17
WTR YR 1972 TOTAL 99.971 MEAN 273 MAX 5.830 MIN 33 CFSM 1.37 IN 18.59

04031500 Presque Isle River at Marenisco, Mich.

LOCATION.--Lat 46°22'20", long 89°41'32", in SE 1/4 NW 1/4 sec.21, T.46 N., R.43 W., Gogebic County, on left bank 0.3 mile upstream from highway bridge in Marenisco, and 1.5 miles downstream from confluence of East and West Branches.

DRAINAGE AREA.--171 sq mi.

PERIOD OF RECORD.--February 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.30 ft above mean sea level (levels by Michigan Department of Natural Resources). Prior to May 27, 1949, nonrecording gage at site 0.3 mile downstream at different datum.

AVERAGE DISCHARGE.--27 years, 176 cfs (13.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,260 cfs Aug. 18 (gage height, 7.98 ft); minimum, 61 cfs June 9, 11 (gage height, 3.72 ft).
Period of record: Maximum discharge, 3,520 cfs Apr. 25, 1960 (gage height, 11.25 ft); minimum observed, 13 cfs Sept. 30, 1948 (gage height, 2.25 ft, site and datum then in use).

REMARKS.--Records fair. Occasional regulation for lake or pond level control at several places above station.

REVISIONS (WATER YEARS).--WSP 1707: 1954. WSP 1911: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	154	115	85	80	74	125	1,070	195	298	149	316
2	121	182	110	85	80	72	125	994	159	244	103	303
3	135	191	105	84	82	70	125	890	130	200	91	269
4	123	183	105	84	82	70	125	748	111	174	96	246
5	103	185	102	84	81	70	125	649	100	148	97	242
6	93	175	101	84	81	72	122	619	90	129	94	238
7	92	157	101	83	81	74	122	616	84	112	118	229
8	99	188	101	82	81	78	122	538	76	106	134	221
9	101	136	103	82	80	80	122	485	66	102	144	204
10	114	134	122	82	80	80	125	430	65	95	135	191
11	109	122	140	81	80	81	135	335	64	92	154	185
12	98	109	150	81	80	82	160	298	69	93	147	177
13	95	103	130	80	78	82	200	295	72	88	128	178
14	97	100	115	80	78	82	240	287	145	92	108	168
15	83	107	110	80	78	84	300	273	161	87	103	150
16	80	106	100	80	77	84	376	258	143	86	659	151
17	86	150	100	80	77	86	458	239	124	95	1,160	209
18	82	254	98	80	77	86	567	184	106	139	1,180	190
19	86	285	96	80	77	88	537	161	93	131	988	168
20	83	273	94	80	77	92	589	166	415	157	572	174
21	82	240	93	80	77	105	691	159	548	219	424	304
22	87	215	92	80	77	125	728	158	474	360	500	324
23	84	195	91	80	77	140	673	147	323	502	415	292
24	110	180	90	78	77	140	625	132	147	523	409	252
25	103	165	89	78	76	140	604	119	152	467	476	215
26	98	150	88	78	76	135	631	110	148	391	471	311
27	113	140	87	78	76	135	728	103	133	309	435	345
28	114	130	87	78	76	130	905	101	202	223	318	329
29	103	125	87	78	75	130	1,070	124	306	198	218	327
30	152	120	87	80	------	130	1,130	222	326	184	236	312
31	193	------	86	80	------	125	------	234	------	164	265	------
TOTAL	3,236	4,954	3,175	2,505	2,274	3,022	12,585	11,144	5,227	6,208	10,527	7,220
MEAN	104	165	102	80.8	78.4	97.5	420	359	174	200	340	241
MAX	193	285	150	85	82	140	1,130	1,070	548	523	1,180	345
MIN	80	100	86	78	75	70	122	101	64	86	91	150
CFSM	.61	.96	.60	.47	.46	.57	2.46	2.10	1.02	1.17	1.99	1.41
IN.	.70	1.08	.69	.54	.49	.66	2.74	2.42	1.14	1.35	2.29	1.57

CAL YR 1971 TOTAL 71,701 MEAN 196 MAX 1,700 MIN 42 CFSM 1.15 IN 15.60
WTR YR 1972 TOTAL 72,077 MEAN 197 MAX 1,180 MIN 64 CFSM 1.15 IN 15.68

04037500 Cisco Branch Ontonagon River at Cisco Lake Outlet, Mich.

LOCATION.--Lat 46°15'12", long 89°27'05", in E 1/2 sec.32, T.45 N., R.41 W., Gogebic County, on right bank 80 ft downstream from Cisco Lake Dam, 2.5 miles upstream from Langford Creek, 5.0 miles upstream from U.S. Highway 2, and 13 miles west of Watersmeet.

DRAINAGE AREA.--50.7 sq mi.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,672.69 ft above mean sea level. Prior to Oct. 1, 1968, nonrecording gage at same site at datum 4.0 ft higher.

AVERAGE DISCHARGE.--28 years, 46.7 cfs (12.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 203 cfs Aug. 16 (gage height, 5.65 ft); minimum daily, 0.19 cfs June 6-9, 13; minimum gage height, 3.87 ft June 5-10, 12-14.

Period of record: Maximum discharge, 288 cfs May 1-4, 1951 (gage height, 6.10 ft, present datum); minimum daily, 0.13 cfs Aug. 4-7, Aug. 22 to Sept. 5, 1970.

REMARKS.--Records fair. Flow regulated by Cisco Lake (usable capacity, 15,600 acre-ft).

REVISIONS.--WSP 1911: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	94	41	56	57	43	28	89	.22	.72	60	30
2	69	93	41	55	57	43	28	93	.22	.54	58	30
3	78	91	41	40	56	43	29	95	.22	.37	30	30
4	74	90	40	26	56	44	29	92	.22	.35	3.9	30
5	54	90	41	27	39	45	29	87	.22	.34	3.3	51
6	38	84	34	27	26	45	29	92	.19	.34	2.9	68
7	39	82	27	27	26	52	29	98	.19	.31	10	64
8	40	82	27	28	26	58	36	96	.19	.28	22	63
9	38	79	28	28	27	57	44	96	.19	.21	48	63
10	38	78	29	28	27	56	44	89	.20	.24	62	63
11	37	77	46	28	27	55	52	44	.22	.26	71	60
12	38	75	59	28	27	54	58	5.8	.22	.31	78	60
13	38	74	58	29	27	46	70	1.9	.19	.34	77	58
14	39	74	57	29	26	39	78	1.9	15	10	47	32
15	39	71	57	29	26	32	77	1.6	24	16	26	12
16	39	70	58	30	27	24	77	1.2	24	16	119	8.2
17	40	72	57	29	27	25	78	1.2	24	44	197	4.8
18	90	72	57	29	27	25	79	1.0	25	104	195	4.5
19	138	72	56	29	28	25	80	.70	25	134	192	18
20	131	71	42	29	28	25	81	.40	64	135	185	41
21	127	71	28	30	28	44	83	.40	97	138	180	95
22	121	72	28	30	29	71	87	.37	94	163	172	128
23	118	72	28	30	29	78	88	.31	58	180	168	124
24	114	70	28	31	29	77	89	.25	11	172	170	120
25	111	69	28	33	35	76	89	.25	.86	93	166	86
26	107	69	28	41	44	74	89	.25	.83	29	162	97
27	108	68	29	62	44	64	92	.25	.55	30	159	121
28	101	67	37	62	44	53	92	.25	.40	47	105	122
29	98	53	52	61	44	40	82	.25	.38	61	43	124
30	99	41	57	60	------	27	87	.25	.50	61	30	124
31	97	------	57	59	------	28	------	.22	------	61	31	------
TOTAL	2,356	2,243	1,296	1,130	993	1,468	1,933	989.75	467.21	1,498.61	2,873.1	1,931.5
MEAN	76.0	74.8	41.8	36.5	34.2	47.4	64.4	31.9	15.6	48.3	92.7	64.4
MAX	138	94	59	62	57	78	92	98	97	180	197	128
MIN	37	41	27	26	26	24	28	.22	.19	.21	2.9	4.5

CAL YR 1971 TOTAL 19,685.15 MEAN 53.9 MAX 179 MIN 1.3
WTR YR 1972 TOTAL 19,179.17 MEAN 52.4 MAX 197 MIN .19

04061000 Brule River near Florence, Wis.

LOCATION.--Lat 45°57'31", long 88°15'57", in SE 1/4 SE 1/4 sec.11, T.41 N., R.32 W., Michigan meridian, Iron County, on left bank 40 ft upstream from highway bridge, 1 mile upstream from Paint River, 2.5 miles north of Florence, and 5.0 miles upstream from confluence with Michigamme River.

DRAINAGE AREA.--389 sq mi.

PERIOD OF RECORD.--January 1914 to February 1916, June 1944 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,210 ft (from topographic map). Prior to Aug. 29, 1944, nonrecording gage at bridge 40 ft downstream at same datum.

AVERAGE DISCHARGE.--29 years (1914-15, 1944-72), 355 cfs (12.39 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,320 cfs Apr. 30 (gage height, 4.65 ft); maximum gage height, 7.13 ft Dec. 30 (backwater from ice); minimum daily discharge, 240 cfs Jan. 16-22; minimum gage height, 2.12 ft Aug. 6.

Period of record: Maximum discharge, 4,700 cfs July 2, 1953 (gage height, 6.57 ft); maximum gage height, 8.27 ft Dec. 26, 1969 (backwater from ice); minimum discharge, 118 cfs Dec. 2, 1963 (discharge measurement); minimum gage height, 1.79 ft July 24, 1964.

REMARKS.--Records good except those for winter periods, which are fair. Discharge includes some mine pumpage (see sta 04060500).

REVISIONS (WATER YEARS).--WSP 1387: 1914-16. WSP 1911: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	356	250	240	265	260	325	2,250	501	321	289	454
2	600	423	245	300	265	255	320	2,140	446	311	280	414
3	760	449	245	290	260	250	315	1,970	423	285	286	383
4	800	404	250	275	250	250	310	1,700	418	275	280	368
5	700	370	255	260	260	245	305	1,370	392	270	270	399
6	560	344	260	260	255	245	300	1,180	373	275	267	379
7	530	326	270	255	255	245	300	1,080	356	294	295	373
8	560	333	280	260	255	250	300	939	345	302	350	363
9	550	314	290	255	255	255	295	809	359	301	391	346
10	540	287	300	270	255	260	300	707	361	299	343	343
11	510	293	315	260	255	265	310	645	349	284	343	331
12	460	291	325	255	255	275	320	594	401	302	335	324
13	450	291	335	250	255	285	340	553	414	279	304	317
14	430	297	340	250	255	295	370	540	403	278	285	312
15	410	289	340	245	255	305	420	521	394	283	277	299
16	390	287	330	240	255	320	494	487	375	275	1,060	292
17	370	302	325	240	255	340	651	457	351	311	1,750	301
18	350	341	320	240	255	350	807	434	334	425	1,640	300
19	340	368	315	240	250	360	877	412	327	377	1,250	291
20	330	352	310	240	250	370	900	395	482	331	816	304
21	330	334	305	240	250	370	1,100	421	593	452	638	645
22	330	325	300	240	250	375	1,130	398	491	520	657	619
23	320	320	290	245	250	375	991	373	403	536	631	486
24	320	315	285	245	250	370	922	358	367	486	710	405
25	315	310	285	250	255	365	906	350	346	409	990	387
26	315	300	280	250	255	360	1,010	345	324	359	1,020	916
27	315	295	280	255	260	355	1,270	342	312	348	816	1,070
28	315	290	280	260	260	350	1,640	346	411	326	647	976
29	313	280	280	265	260	345	2,030	425	460	315	547	990
30	308	260	285	270	------	335	2,290	650	369	301	484	866
31	348	------	290	270	------	330	------	619	------	294	459	------
TOTAL	13,619	9,746	9,040	7,975	7,415	9,610	21,868	23,810	11,885	10,424	18,710	14,253
MEAN	439	325	292	257	256	310	728	768	396	336	604	475
MAX	800	449	340	300	265	375	2,290	2,250	593	536	1,750	1,070
MIN	308	260	245	240	250	245	295	342	312	270	267	291
CFSM	1.13	.84	.75	.66	.66	.80	1.87	1.97	1.02	.86	1.55	1.22
IN.	1.30	.93	.87	.76	.71	.92	2.09	2.28	1.14	1.00	1.79	1.36

CAL YR 1971 TOTAL 141,662 MEAN 388 MAX 1,940 MIN 219 CFSM 1.00 IN 13.55
WTR YR 1972 TOTAL 158,355 MEAN 433 MAX 2,290 MIN 240 CFSM 1.11 IN 15.14

04063000 Menominee River near Florence, Wis.

LOCATION.--Lat 45°57'04", long 88°11'13", in NE 1/4 sec.16, T.41 N., R.31 W., Michigan meridian, Iron County, on left bank 0.5 mile downstream from confluence of Brule and Michigamme Rivers, 3.5 miles northeast of Florence, and at mile 117.

DRAINAGE AREA.--1,780 sq mi.

PERIOD OF RECORD.--January 1914 to current year. Published as "at Twin Falls near Iron Mountain, Mich." 1914-57. Records published for both sites July 1950 to September 1957.

GAGE.--Water-stage recorder. Altitude of gage is 1,120 ft (from topographic map). Prior to July 1950, head-water and tailwater gages and generation data entered hourly in daily log sheets by company employees at the Twin Falls Powerplant of Wisconsin-Michigan Power Co., 10.4 miles downstream.

AVERAGE DISCHARGE.--58 years, 1,788 cfs.

EXTREMES.--Current year: Maximum discharge, 9,500 cfs May 4 (gage height, 9.35 ft); minimum, 110 cfs Oct. 31 (gage height, 1.56 ft); minimum daily, 660 cfs Jan. 29.

Period of record: Maximum discharge, 19,500 cfs Apr. 26, 1960 (gage height, 14.15 ft); minimum, 38 cfs Aug. 21, 1962; minimum gage height, 1.18 ft Aug. 21, 1962, Nov. 4, 1965; minimum daily discharge, 154 cfs Aug. 9, 1925.

REMARKS.--Records excellent. Prior to July 1950 discharge determined from powerplant records computed on basis of load-discharge rating of hydroelectric units and rating for tailwater gage during periods of spill. Rating developed by Geological Survey. Flow regulated by powerplants, and by Michigamme Reservoir (capacity, 119,950 acre-ft) and Peavy Pond (capacity, 33,860 acre-ft) on Michigamme River, and by many smaller reservoirs above station.

REVISIONS (WATER YEARS).--WSP 1707: 1953(M). WSP 1911: Drainage area of former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,670	1,610	1,430	1,830	1,380	2,100	1,600	8,880	3,330	1,840	1,510	2,210
2	1,840	1,680	1,630	1,670	1,290	2,010	1,390	8,790	3,040	1,620	1,410	2,170
3	2,100	1,830	1,400	2,150	1,360	1,350	1,220	8,650	2,490	1,210	1,480	1,720
4	1,990	1,850	1,470	1,790	1,500	1,160	1,260	9,270	2,180	1,180	1,350	1,750
5	2,230	2,000	1,450	2,140	921	1,140	1,230	8,400	2,380	1,490	727	1,760
6	2,100	1,650	1,470	1,780	750	1,970	1,570	7,360	2,050	1,550	757	1,750
7	2,060	1,790	1,680	1,510	1,790	2,260	1,490	5,310	1,680	1,450	1,620	1,730
8	1,840	1,900	1,670	1,050	1,700	2,240	1,140	5,310	1,850	961	1,530	1,860
9	1,640	1,870	1,840	1,340	1,590	2,070	1,010	6,070	1,440	710	1,550	1,350
10	1,050	1,890	2,060	1,750	1,410	1,580	1,270	6,890	1,020	1,580	1,720	1,180
11	1,610	1,840	2,120	1,530	1,630	1,160	1,830	6,450	947	1,610	1,470	1,480
12	1,380	1,970	1,230	1,640	1,080	1,130	2,110	5,250	1,560	1,500	1,500	1,630
13	1,710	1,900	1,770	2,030	714	1,920	2,370	4,360	1,470	1,290	1,060	1,530
14	1,770	1,980	1,650	2,060	1,790	2,210	2,020	4,700	1,660	1,440	1,660	1,330
15	1,320	2,110	1,800	1,630	1,660	1,900	2,020	5,100	1,660	740	1,600	1,380
16	947	1,950	2,080	1,060	1,870	1,800	1,760	4,250	1,680	790	2,920	980
17	729	2,120	2,170	1,900	1,880	1,480	2,170	3,940	1,350	1,640	4,610	929
18	1,670	2,020	1,810	1,400	1,410	884	2,720	3,370	1,040	1,560	4,080	1,570
19	1,600	1,930	1,850	1,620	1,010	971	3,000	2,830	1,410	1,630	3,790	1,520
20	1,690	1,870	2,000	1,440	950	1,680	2,480	2,800	1,840	1,870	3,250	1,800
21	1,730	1,740	1,850	1,680	1,870	2,070	3,240	3,100	2,330	2,000	3,210	1,690
22	1,690	1,550	2,100	1,000	1,920	2,180	3,960	3,630	2,210	2,020	3,000	2,030
23	885	1,570	2,000	781	1,970	1,910	3,680	3,530	2,260	2,210	2,510	1,720
24	819	1,540	1,980	2,260	2,090	2,170	3,510	2,890	2,140	2,230	2,630	1,940
25	1,740	834	1,710	1,940	1,890	1,950	3,530	2,630	2,100	2,260	3,320	2,240
26	1,510	1,460	1,560	1,250	1,430	2,070	3,630	2,370	2,280	2,170	3,740	3,800
27	1,700	1,120	1,940	1,500	1,640	1,730	4,030	1,630	2,140	1,600	3,570	4,040
28	1,480	898	2,000	1,430	1,740	1,880	4,730	1,470	2,220	1,240	3,340	3,930
29	1,420	1,610	2,000	660	2,230	1,510	6,960	2,040	1,850	836	2,920	4,040
30	1,480	1,500	2,000	800	------	1,680	8,420	3,020	2,050	752	2,730	4,120
31	1,310	------	1,900	1,580	------	1,570	------	3,650	------	1,680	2,560	------
TOTAL	48,710	51,582	55,620	48,201	44,465	53,735	81,350	147,940	57,737	46,659	73,124	61,179
MEAN	1,571	1,719	1,794	1,555	1,533	1,733	2,712	4,772	1,925	1,505	2,359	2,039
MAX	2,230	2,120	2,170	2,260	2,230	2,260	8,420	9,270	3,330	2,260	4,610	4,120
MIN	729	834	1,230	660	714	884	1,010	1,470	947	710	727	929

CAL YR 1971 TOTAL 731,973 MEAN 2,005 MAX 9,920 MIN 484
WTR YR 1972 TOTAL 770,302 MEAN 2,105 MAX 9,270 MIN 660

STREAMS TRIBUTARY TO LAKE MICHIGAN

04063700 Popple River near Fence, Wis.
(Hydrologic benchmark station)

LOCATION.--Lat 45°45'49", long 88°27'47", in NW 1/4 sec.23, T.38 N., R.16 E., Florence County, on left bank 20 ft upstream from bridge on U.S. Forest Service road 2159, 1.8 miles downstream from Mud Creek, 2.6 miles northwest of Fence, and 11.5 miles upstream from mouth.

DRAINAGE AREA.--131 sq mi.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,406.16 ft above mean sea level. Prior to June 18, 1964, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--9 years, 123 cfs (12.75 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,120 cfs May 2 (gage height, 4.14 ft); minimum, 39 cfs Aug. 6 (gage height, 1.31 ft).
Period of record: Maximum discharge, 1,120 cfs May 2, 1972 (gage height, 4.21 ft); minimum, 15 cfs July 19, 23, 24, 1964 (gage height, 1.04 ft).

REMARKS.--Records good except those for winter months, which are fair. Records of chemical analysis, water temperatures, and suspended sediment loads for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Oct. 1 to Dec. 9, Apr. 15 to June 2, June 8 to Sept. 30; stage-discharge relation affected by ice Dec. 10 to Apr. 14.)

1.0	17	2.6	360
1.4	50	3.0	520
1.8	120	3.7	860
2.2	230	4.3	1,160

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	125	86	70	46	44	84	1,020	132	52	50	106
2	340	158	80	70	43	44	84	1,100	110	49	53	108
3	504	176	77	66	43	45	82	1,100	92	43	62	102
4	640	176	76	64	44	45	80	1,040	82	42	59	88
5	665	165	76	64	45	45	80	925	77	41	65	84
6	620	148	78	64	46	45	80	810	74	40	42	81
7	580	135	80	64	47	44	78	695	70	44	47	80
8	540	135	82	66	48	44	78	595	60	46	78	78
9	492	110	82	68	48	44	82	512	60	46	114	72
10	428	100	90	68	47	44	88	460	59	43	130	66
11	440	98	100	70	47	44	92	396	58	42	150	65
12	293	98	120	70	46	44	100	340	59	44	128	59
13	245	100	110	70	47	45	120	293	64	44	112	58
14	194	96	100	70	47	45	150	263	68	46	96	53
15	155	94	96	70	47	46	197	242	70	50	82	50
16	125	94	94	68	49	47	251	227	65	49	102	48
17	116	96	92	70	48	48	305	209	60	52	162	44
18	110	110	90	70	47	50	368	179	53	88	197	42
19	112	128	84	68	46	52	396	155	49	96	203	48
20	125	132	82	70	46	56	452	140	58	80	203	59
21	128	130	82	68	46	64	508	128	80	82	182	150
22	128	122	80	66	45	72	420	125	84	98	155	179
23	122	110	80	64	45	82	436	130	74	104	130	165
24	116	100	78	62	45	86	476	120	66	100	142	138
25	112	96	76	60	46	88	472	106	60	84	162	130
26	112	92	76	62	45	90	500	96	53	76	182	314
27	110	96	74	60	45	90	556	88	49	74	200	364
28	108	94	72	58	45	90	650	82	71	64	197	404
29	104	90	72	54	44	88	775	100	68	58	182	428
30	102	88	70	52	------	88	910	148	59	53	142	440
31	116	------	70	50	------	86	------	152	------	50	114	------
TOTAL	8,209	3,492	2,605	2,016	1,333	1,845	8,950	11,976	2,084	1,880	3,923	4,103
MEAN	265	116	84.0	65.0	46.0	59.5	298	386	69.5	60.6	127	137
MAX	665	176	120	70	49	90	910	1,100	132	104	203	440
MIN	102	88	70	50	43	44	78	82	49	40	42	42
CFSM	2.02	.89	.64	.50	.35	.45	2.27	2.95	.53	.46	.97	1.05
IN.	2.33	.99	.74	.57	.38	.52	2.54	3.40	.59	.53	1.11	1.17

CAL YR 1971 TOTAL 45,023 MEAN 123 MAX 820 MIN 28 CFSM .94 IN 12.79
WTR YR 1972 TOTAL 52,416 MEAN 143 MAX 1,100 MIN 40 CFSM 1.09 IN 14.88

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-5	0600	3.33	670	9-30	1800	2.85	444
5-2	2400	4.14	1,120				

04064500 Pine River below Pine River Powerplant, near Florence, Wis.

LOCATION.--Lat 45°50'16", long 88°13'31", in SW 1/4 sec.22, T.39 N., R.18 E., Florence County, on left bank 60 ft upstream from bridge on County Trunk N, 1.9 miles downstream from powerplant of Wisconsin-Michigan Power Co., 6.0 miles south of Florence, and 7.0 miles downstream from Popple River.

DRAINAGE AREA.--528 sq mi.

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,098.84 ft above mean sea level. Prior to October 1968, record obtained from Pine River powerplant 1.9 miles upstream with a drainage area of 528 sq mi.

AVERAGE DISCHARGE.--49 years, 427 cfs (10.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,000 cfs May 2 (gage height, 8.46 ft); minimum daily, 150 cfs Feb. 2, 3.

Period of record: Maximum daily discharge, 4,380 cfs Apr. 9, 1929; no flow at times during 1924, 1926-27, 1930-31, 1933, 1940.

REMARKS.--Records good except those for winter months, which are fair. Flow regulated by Pine River powerplant 1.9 miles upstream; pondage is small and monthly discharge is near natural flow.

REVISIONS.--WSP 1237: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Dec. 2-4, 11-14, Dec. 17 to Apr. 14.)

1.8	128	5.5	1,690
2.5	305	6.5	2,330
3.5	665	7.5	3,080
4.5	1,130	8.5	4,040

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	822	473	265	290	180	190	320	3,100	600	288	203	576
2	1,330	602	220	290	150	180	310	3,680	526	316	291	505
3	1,570	641	270	290	150	180	300	3,540	476	309	279	480
4	1,830	648	200	290	160	180	310	3,190	395	245	305	410
5	1,690	640	282	280	190	190	280	2,780	379	258	258	445
6	1,480	540	355	270	200	190	310	2,440	324	252	236	481
7	1,300	494	324	270	220	190	270	2,120	333	243	255	453
8	1,260	334	322	290	230	200	260	1,850	395	272	390	439
9	1,150	404	323	300	240	200	270	1,630	318	254	474	398
10	1,010	436	356	310	230	200	300	1,390	304	364	493	381
11	860	376	380	320	220	190	310	1,240	226	206	559	397
12	740	327	460	320	210	190	340	1,080	331	256	520	357
13	669	390	330	300	200	180	400	1,000	336	283	469	260
14	601	341	380	270	230	190	490	886	332	207	421	265
15	565	340	442	240	210	200	614	903	332	235	361	204
16	474	379	363	220	190	190	918	824	296	267	526	265
17	367	325	350	260	220	190	1,350	736	253	373	780	261
18	446	434	340	250	200	200	1,630	730	280	436	900	301
19	406	427	310	240	180	210	1,620	640	323	493	840	189
20	465	458	300	230	170	220	1,700	577	262	471	800	254
21	504	488	300	260	190	260	1,950	562	485	449	700	538
22	460	358	310	270	190	300	1,730	508	469	585	616	698
23	457	317	310	270	200	310	1,530	508	399	704	601	724
24	434	351	310	270	200	320	1,610	507	330	730	621	621
25	421	357	310	270	200	330	1,570	499	306	613	739	539
26	401	360	310	270	200	330	1,680	334	308	535	840	1,300
27	402	335	300	280	200	330	1,950	335	220	331	900	1,500
28	409	333	280	280	200	330	2,290	337	377	357	800	1,700
29	379	326	260	270	200	330	2,660	451	446	332	654	1,900
30	379	380	280	270	------	330	2,930	699	376	320	571	1,600
31	402	------	290	250	------	320	------	656	------	334	504	------
TOTAL	23,683	12,614	9,832	8,490	5,750	7,350	32,202	39,732	10,737	11,318	16,906	18,441
MEAN	764	420	317	274	198	237	1,073	1,282	358	365	545	615
MAX	1,830	648	460	320	240	330	2,930	3,680	600	730	900	1,900
MIN	367	317	200	220	150	180	260	334	220	206	203	189
CFSM	1.45	.80	.60	.52	.38	.45	2.03	2.43	.68	.69	1.03	1.16
IN.	1.67	.89	.69	.60	.41	.52	2.27	2.80	.76	.80	1.19	1.30

CAL YR 1971 TOTAL 172,297 MEAN 472 MAX 2,480 MIN 124 CFSM .89 IN 12.14
WTR YR 1972 TOTAL 197,055 MEAN 538 MAX 3,680 MIN 150 CFSM 1.02 IN 13.88

04066000 Menominee River near Pembine, Wis.

LOCATION.--Lat 45°35'24", long 87°46'34", in sec.21, T.37 N., R.28 W., Michigan meridian, Menominee County, Mich., on left bank 0.1 mile upstream from Pemene Creek, 4.0 miles west of Nathan, Mich., 15 miles southeast of Pembine, and at mile 65.3.

DRAINAGE AREA.--3,240 sq mi, approximately.

PERIOD OF RECORD.--October 1949 to current year. Monthly discharge only for some periods, published in WSP 1307.

GAGE.--Water-stage recorder. Altitude of gage is 745 ft (from river-profile map).

AVERAGE DISCHARGE.--23 years, 2,965 cfs.

EXTREMES.--Current year: Maximum daily discharge, 18,000 cfs May 1-3; minimum, 946 cfs Aug. 7 (gage height, 1.85 ft).

Period of record: Maximum discharge, 26,900 cfs May 8, 1960 (gage height, 13.90 ft); minimum, 694 cfs Sept. 3, 1969 (gage height, 1.66 ft).

REMARKS.--Records good except those for winter months, which are poor. Flow regulated by powerplants and by Michigamme Reservoir (capacity, 119,950 acre-ft) and Peavy Pond (capacity, 33,860 acre-ft) on the Michigamme River, and by many smaller reservoirs above station.

REVISIONS (WATER YEARS).--WSP 1277: 1952.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 3-5, 7, Dec. 13 to Apr. 11.)

1.8	855	6.0	6,470
2.5	1,500	8.0	10,400
4.0	3,330	11.0	18,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,860	2,260	2,360	2,700	1,500	2,400	2,500	18,000	5,640	2,800	2,220	3,670
2	3,310	3,200	2,190	2,500	1,800	2,300	2,200	18,000	4,850	2,590	2,070	3,110
3	4,330	3,690	2,300	2,400	1,600	2,000	2,200	18,000	4,490	2,310	1,920	3,020
4	4,860	3,660	2,500	2,500	1,700	1,700	2,200	17,000	3,750	2,050	2,180	2,660
5	4,940	3,580	2,400	2,500	1,700	1,600	2,200	16,000	2,970	1,940	1,960	2,280
6	4,880	3,600	2,400	2,400	1,600	1,700	2,100	14,000	3,140	2,080	1,420	2,360
7	4,400	2,750	2,400	2,300	1,800	2,000	2,300	11,000	2,770	2,250	1,390	2,470
8	4,090	2,810	2,230	2,200	1,500	2,300	2,300	9,600	2,410	1,840	1,680	2,660
9	4,130	2,930	2,530	2,200	1,900	2,300	1,900	9,800	2,490	1,620	2,410	2,670
10	3,590	2,560	2,760	2,000	2,000	2,300	2,200	10,500	2,320	1,470	2,440	2,140
11	2,930	2,860	3,280	2,200	1,900	2,000	2,600	9,690	1,930	1,880	2,530	1,790
12	2,970	3,050	2,910	2,300	1,700	1,600	3,400	8,520	1,630	2,170	2,630	1,700
13	2,960	2,810	2,300	2,300	1,500	1,800	4,000	6,720	2,110	2,070	2,550	2,020
14	2,970	2,560	3,000	2,400	1,600	2,100	4,900	6,380	2,500	1,960	2,000	2,230
15	2,830	2,950	3,600	2,200	2,000	2,600	6,000	6,650	2,540	1,860	2,220	1,700
16	2,470	2,690	2,900	2,100	2,200	2,300	8,600	7,190	2,420	1,570	2,420	1,640
17	1,390	2,890	2,400	2,000	2,200	2,100	10,000	5,580	2,490	1,490	5,800	1,460
18	1,910	2,800	2,300	1,800	2,000	2,200	11,000	5,470	2,170	2,130	6,220	1,410
19	2,190	3,040	2,500	2,300	1,900	1,800	11,000	4,580	1,610	2,600	5,700	1,870
20	2,940	2,920	2,600	2,100	1,600	2,300	11,400	4,420	2,180	2,550	5,090	2,040
21	2,770	2,870	2,700	2,200	1,800	2,700	11,600	3,790	3,020	3,110	4,640	2,280
22	2,920	2,900	2,800	2,100	2,000	2,600	11,000	4,660	3,270	3,110	4,500	2,940
23	2,410	2,530	3,200	1,800	2,200	2,500	10,800	4,830	3,460	3,370	4,600	2,890
24	1,930	2,210	3,100	2,100	2,200	2,400	10,600	4,340	3,140	3,480	3,250	2,880
25	1,870	1,890	2,900	1,700	2,300	2,700	10,600	3,780	2,970	3,570	4,860	2,980
26	2,520	1,890	2,600	1,800	2,200	2,800	11,000	3,610	3,020	3,340	4,820	4,040
27	2,680	2,070	2,300	2,100	2,000	2,800	12,000	3,100	3,250	2,800	6,200	6,830
28	2,620	1,990	2,600	1,800	2,200	2,600	13,000	2,370	2,850	2,480	5,150	6,970
29	2,310	1,790	2,500	2,000	2,300	2,500	15,000	2,160	3,100	2,010	5,090	7,490
30	2,150	2,040	2,600	1,600	------	2,500	17,000	4,160	3,120	1,510	4,070	7,550
31	2,340	------	2,400	1,500	------	2,400	------	5,250	------	1,520	3,530	------
TOTAL	93,470	81,690	81,560	66,100	54,900	69,900	217,600	249,150	87,610	71,530	107,560	91,750
MEAN	3,015	2,723	2,631	2,132	1,893	2,255	7,253	8,037	2,920	2,307	3,470	3,058
MAX	4,940	3,690	3,600	2,700	2,300	2,800	17,000	18,000	5,640	3,570	6,220	7,550
MIN	1,390	1,790	2,190	1,500	1,500	1,600	1,900	2,160	1,610	1,470	1,390	1,410

CAL YR 1971 TOTAL 1,114,060 MEAN 3,052 MAX 15,600 MIN 1,130
WTR YR 1972 TOTAL 1,272,820 MEAN 3,478 MAX 18,000 MIN 1,390

NOTE.--No gage-height record Apr. 12 to May 5, May 7-10.

04067000 Menominee River below Koss, Mich.

LOCATION.--Lat 45°21'16", long 87°38'55", in sec.9, T.34 N., R.27 W., Michigan meridian, Menominee County, on left bank at powerplant of Wisconsin Public Service Corp., 0.5 mile upstream from Little Cedar River, 3.6 miles southeast of Koss, and at mile 24.7.

DRAINAGE AREA.--3,790 sq mi, approximately.

PERIOD OF RECORD.--July 1907 to March 1909 (published as "at Koss"), July 1913 to current year.

GAGE.--Headwater and tailwater gages and generation data entered hourly in daily log sheet by company employees. Prior to June 1913, chain gage on railroad bridge 4 miles upstream.

AVERAGE DISCHARGE.--60 years (1907-8, 1913-72), 3,129 cfs.

EXTREMES.--Current year: Maximum daily discharge, 18,700 cfs May 3; minimum daily, 1,360 cfs Aug. 7.
Period of record: Maximum daily discharge, 33,000 cfs May 10, 1960; minimum daily, 162 cfs Sept. 15, 1931.

REMARKS.--Records fair. Daily discharge computed on basis of average daily load and load-discharge rating of combined hydroelectric units. Flow regulated by powerplants, and by Michigamme Reservoir (capacity, 119,950 acre-ft) and Peavy Pond (capacity, 33,860 acre-ft) on Michigamme River, and by many smaller reservoirs above station.

COOPERATION.--Records of daily discharge furnished by Wisconsin Public Service Corp. since 1913.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,590	2,690	2,020	2,640	1,660	2,360	2,520	15,900	6,650	2,880	1,870	4,120
2	2,690	3,350	2,020	2,880	1,630	2,590	2,560	17,100	6,590	2,760	2,110	4,450
3	4,070	3,840	2,300	2,640	1,940	2,500	2,320	18,700	5,540	2,350	2,200	2,740
4	4,650	4,150	2,160	2,640	1,740	2,360	2,340	18,300	5,140	2,160	2,010	3,070
5	4,940	4,150	2,370	2,640	1,860	1,940	2,300	18,400	3,540	2,050	2,060	2,500
6	4,900	3,960	2,400	2,660	1,860	1,730	2,300	17,200	3,240	1,940	1,870	2,690
7	5,080	3,480	2,740	2,550	1,790	1,790	2,210	15,100	3,240	2,100	1,360	2,760
8	4,590	3,240	2,950	2,550	1,950	2,200	2,400	12,900	2,770	2,270	1,690	2,460
9	4,370	3,000	2,950	2,300	1,620	2,400	2,400	10,300	2,570	2,020	2,210	2,880
10	3,960	3,160	3,000	2,350	2,040	2,500	2,020	9,790	2,560	1,780	2,480	2,480
11	4,030	3,190	3,810	2,090	2,160	2,500	2,210	9,980	2,400	1,850	2,760	2,400
12	3,000	3,190	3,370	2,460	2,110	2,210	2,730	11,000	2,140	1,930	2,880	2,180
13	3,240	3,480	2,730	2,400	2,020	1,730	3,580	9,990	1,930	2,150	2,880	2,070
14	3,300	3,000	2,480	2,500	1,780	1,910	4,110	7,740	2,350	2,200	2,620	2,210
15	3,120	2,910	3,490	2,560	1,620	2,220	4,580	7,540	2,810	2,180	2,180	2,300
16	2,960	3,350	4,070	2,410	1,950	2,700	5,350	7,880	2,710	1,930	2,420	1,920
17	2,680	3,000	3,200	2,280	2,260	2,560	7,970	7,990	2,400	1,910	4,330	1,600
18	1,610	3,240	2,550	2,220	2,320	2,280	10,100	6,390	2,500	2,060	6,370	1,800
19	2,270	3,120	2,460	1,940	2,240	2,240	10,600	5,870	2,210	2,390	6,720	1,920
20	2,800	3,480	2,730	2,420	2,180	1,850	11,700	4,940	1,870	2,690	6,600	1,920
21	3,240	3,220	2,760	2,280	1,750	2,120	11,800	4,580	2,750	2,690	5,470	2,100
22	3,000	3,270	2,950	2,280	1,700	2,850	11,800	4,330	3,120	3,360	5,250	2,640
23	3,240	3,000	3,000	2,350	2,050	2,880	12,000	4,970	2,910	3,120	4,780	2,920
24	2,510	2,850	3,400	1,940	2,300	2,880	11,600	5,250	2,950	3,360	4,300	2,760
25	2,310	2,450	3,320	2,270	2,300	2,520	11,100	4,580	2,880	3,360	3,720	3,000
26	2,350	2,120	3,120	1,890	2,400	2,880	11,100	3,720	2,760	3,480	4,940	3,760
27	2,740	2,310	2,820	1,860	2,500	3,000	11,100	3,360	2,620	2,960	5,800	5,780
28	2,860	2,490	2,470	2,280	2,110	3,000	11,400	2,800	3,070	2,680	6,900	7,450
29	2,910	2,230	2,760	1,940	2,210	2,880	12,700	2,500	2,980	2,400	5,770	7,750
30	2,600	2,490	2,640	2,090	------	2,700	14,100	3,600	2,680	1,930	6,510	7,730
31	2,530	------	2,760	1,800	------	2,700	------	5,480	------	1,660	4,740	------
TOTAL	101,140	93,410	87,800	72,110	58,050	74,980	205,000	278,180	93,880	74,600	117,800	96,360
MEAN	3,263	3,114	2,832	2,326	2,002	2,419	6,833	8,974	3,129	2,406	3,800	3,212
MAX	5,080	4,150	4,070	2,880	2,500	3,000	14,100	18,700	6,650	3,480	6,900	7,750
MIN	1,610	2,120	2,020	1,800	1,620	1,730	2,020	2,500	1,870	1,660	1,360	1,600

CAL YR 1971 TOTAL 1,271,050 MEAN 3,482 MAX 17,000 MIN 1,300
WTR YR 1972 TOTAL 1,353,310 MEAN 3,698 MAX 18,700 MIN 1,360

04069500 Peshtigo River at Peshtigo, Wis.

LOCATION.--Lat 45°02'49", long 87°44'40", in NE 1/4 sec.30, T.30 N., R.23 E., Marinette County, on left bank 75 ft downstream from Chicago and Northwestern Railway bridge, 0.5 mile downstream from Wisconsin Public Service Corp. powerplant in Peshtigo, and 11.5 miles upstream from mouth.

DRAINAGE AREA.--1,124 sq mi.

PERIOD OF RECORD.--June 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 584.64 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 889 cfs (10.74 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,920 cfs May 3 (gage height, 9.52 ft); minimum, 162 cfs June 27 (gage height, 1.37 ft); minimum daily, 310 cfs July 5.

Period of record: Maximum discharge, 9,790 cfs May 9, 1960 (gage height, 11.59 ft), from rating curve extended above 5,000 cfs on basis of computation of peak flow through dam gates; minimum, 17 cfs Nov. 29, 1966 (gage height, 1.00 ft); minimum daily, 84 cfs Aug. 5, 1957.

REMARKS.--Records good except those for winter months, which are fair. Diurnal fluctuation caused by powerplants upstream.

Rating tables (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used May 15 to June 28; stage-discharge relation affected by ice Dec. 10-24, 30, Jan. 2 to Apr. 7.)

Oct. 1 to Apr. 10		Apr. 11 to Sept. 30			
2.0	325	1.9	292	5.0	1,990
3.0	750	2.5	515	7.0	3,590
4.0	1,300	3.5	1,000	9.5	5,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,070	675	548	780	390	430	840	4,920	1,050	612	779	912
2	1,160	1,100	487	640	430	400	840	4,860	1,100	638	781	804
3	1,110	1,600	600	580	480	490	860	5,650	1,040	483	765	631
4	1,220	1,680	626	600	470	580	860	5,730	790	428	639	644
5	1,330	1,420	636	640	500	450	840	5,130	789	310	498	655
6	1,270	1,100	607	580	460	390	900	4,690	664	427	504	771
7	1,300	935	841	660	440	390	940	4,120	738	496	695	689
8	1,280	880	904	680	500	420	1,040	3,490	686	499	754	645
9	1,310	860	859	600	540	500	1,130	2,700	572	443	1,160	613
10	1,110	880	860	560	400	470	1,260	2,300	551	342	983	485
11	891	880	840	500	450	540	1,920	2,080	454	582	1,070	449
12	985	800	800	580	460	500	2,180	2,050	453	685	1,040	680
13	946	760	820	620	400	620	2,520	1,880	854	528	1,070	628
14	857	700	860	700	370	600	3,250	1,500	932	618	853	635
15	741	760	840	560	460	660	3,920	1,400	826	650	824	565
16	637	820	800	560	380	780	4,880	1,700	742	710	837	540
17	686	677	740	540	380	800	5,100	1,550	617	415	1,090	501
18	603	844	660	450	400	820	5,050	1,400	590	623	1,450	426
19	750	962	840	540	480	800	5,280	1,280	479	538	1,400	534
20	706	893	860	680	500	840	5,330	1,250	595	803	1,400	490
21	744	781	740	520	410	840	4,990	930	609	797	1,120	580
22	706	716	640	480	380	820	4,750	898	562	938	1,120	604
23	710	692	700	500	520	780	4,930	950	578	1,050	825	779
24	820	666	780	400	620	780	5,110	897	628	849	1,080	764
25	760	699	814	350	560	800	4,890	776	536	818	1,440	852
26	745	596	850	520	500	860	4,390	729	386	754	1,390	1,240
27	680	850	768	540	420	880	3,860	800	502	751	1,770	1,760
28	750	637	849	450	390	860	3,620	765	495	607	1,670	1,770
29	690	703	873	500	390	840	3,570	621	494	752	1,500	2,300
30	850	656	900	620	------	860	4,010	597	563	633	1,210	2,510
31	760	------	819	370	------	840	------	1,060	------	546	1,070	------
TOTAL	28,177	26,222	23,761	17,300	13,080	20,640	93,060	68,703	19,875	19,325	32,787	25,456
MEAN	909	874	766	558	451	666	3,102	2,216	663	623	1,058	849
MAX	1,330	1,680	904	780	620	880	5,330	5,730	1,100	1,050	1,770	2,510
MIN	603	596	487	350	370	390	840	597	386	310	498	426
CFSM	.81	.78	.68	.50	.40	.59	2.76	1.97	.59	.55	.94	.76
IN.	.93	.87	.79	.57	.43	.68	3.08	2.27	.66	.64	1.09	.84

CAL YR 1971 TOTAL 371,586 MEAN 1,018 MAX 5,430 MIN 320 CFSM .91 IN 12.30
WTR YR 1972 TOTAL 388,386 MEAN 1,061 MAX 5,730 MIN 310 CFSM .94 IN 12.85

04070000 Wheeler Lake near Lakewood, Wis.

LOCATION.--Lat 45°19'07", long 88°28'58", in NW 1/4 sec.27, T.33 N., R.16 E., Oconto County, near the home of Carl Zuelzke on west shore of lake 2.3 miles northeast of Lakewood.

DRAINAGE AREA.--2 sq mi, approximately. Area of Wheeler Lake, 380 acres.

PERIOD OF RECORD.--August 1936 to current year (fragmentary).

GAGE.--Nonrecording gage. Datum of gage is 90.00 ft above datum assumed by Wisconsin Department of Natural Resources; gage readings have been reduced to elevations above this datum. Prior to Apr. 19, 1936, nonrecording gage was located on east shore of lake. Apr. 20, 1939, to Apr. 13, 1960, nonrecording gage was located on southwest shore of lake.

EXTREMES.--Current year: Maximum elevation observed, 6.73 ft May 3; minimum observed, 6.02 ft Oct. 17, Nov. 10, 17.

Period of record: Maximum elevation observed, 6.73 ft May 3, 1972; minimum observed, 3.45 ft Feb. 5, 1950.

REMARKS.--Add 90 ft to obtain elevation above datum assumed for this lake by Wisconsin Department of Natural Resources. Lake has no surface outlet. Lake was ice covered about Nov. 24 to May 5.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2											6.20	
3		6.11						6.73				
4												
5		6.10										6.39
6			6.11				6.06			6.06		
7									6.37			
8						6.54						
9								6.63			6.27	
10		6.02					6.56					
11				6.28	6.31			6.62				
12										6.14		
13	6.04								6.60			6.37
14									6.33			
15												
16											6.33	
17	6.02	6.02						6.59				
18												
19										6.20		6.31
20	6.05											
21												
22									6.21			
23											6.38	
24		6.03						6.51				
25												
26	6.07									6.24		
27												6.39
28									6.15			
29												
30					------							
31		------			------		------	6.45	------			------

04071000 Oconto River near Gillett, Wis.

LOCATION.--Lat 44°51'53", long 88°18'00", in NW 1/4 sec.34, T.28 N., R.18 E., Oconto County, on left bank just upstream from County Trunk BB bridge, 2.0 miles upstream from Christy Brook, 2.0 miles south of Gillett, and at mile 29.

DRAINAGE AREA.--678 sq mi.

PERIOD OF RECORD.--June 1906 to March 1909, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 732.87 ft above mean sea level (levels by Wisconsin Department of Transportation). See WSP 1727 for history of changes prior to Aug. 25, 1938.

AVERAGE DISCHARGE.--61 years (1906-8, 1913-72), 575 cfs (11.52 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,100 cfs Apr. 23 (gage height, 5.44 ft); maximum gage height, 5.58 ft Dec. 19 (backwater from ice); minimum daily discharge, 300 cfs on many days in Jan., Feb.

Period of record: Maximum discharge, 8,400 cfs Apr. 10, 1922 (gage height, 11.2 ft from floodmarks), caused by failure of dam at Pulcifer 4 miles above station; minimum, 93 cfs Nov. 26, 1941 (gage height, 0.13 ft), flow retarded by anchor ice above station.

REMARKS.--Records good except those for winter months, which are fair.

REVISIONS (WATER YEARS).--WSP 384: Drainage area. WSP 1207: 1922. WSP 1307: 1907-8(M), 1914-16(M), 1918-21(M), 1923-33(M), 1937-38(M), 1943(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Sept. 27-30; stage-discharge relation affected by ice Nov. 18 to Apr. 13.)

0.5	165	3.0	1,410
1.0	330	4.0	2,070
1.5	559	5.0	2,770
2.0	820	6.0	3,520

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	648	536	540	330	300	370	720	2,120	590	365	367	720
2	653	740	600	330	310	370	720	2,170	582	355	421	580
3	628	847	700	320	300	380	700	2,210	561	344	429	525
4	618	878	800	310	300	380	700	2,190	532	333	388	495
5	623	896	640	310	300	390	680	2,100	504	326	362	490
6	613	876	580	300	300	410	660	1,940	475	318	349	473
7	593	801	540	300	300	420	640	1,750	452	316	352	481
8	569	717	500	300	300	450	620	1,570	450	343	390	464
9	559	631	460	300	310	470	620	1,430	447	364	489	443
10	554	582	480	300	310	520	620	1,330	435	362	576	425
11	554	570	520	300	310	540	700	1,230	427	397	616	448
12	534	581	660	300	320	560	820	1,150	434	439	586	479
13	510	574	520	300	330	580	980	1,090	455	415	517	472
14	490	567	560	300	330	580	1,210	1,040	524	413	462	458
15	481	556	600	300	340	600	1,490	998	558	419	418	427
16	471	545	680	300	340	600	1,900	977	548	461	464	399
17	456	535	780	300	350	580	2,310	949	507	486	711	381
18	443	540	900	300	350	580	2,580	907	466	448	860	370
19	433	560	1,100	300	360	580	2,860	865	429	424	987	373
20	510	560	660	300	370	560	2,970	798	425	448	1,100	384
21	559	540	540	300	370	560	2,930	713	423	441	1,120	427
22	584	500	500	300	370	600	2,960	677	425	409	933	439
23	584	480	460	310	380	660	3,050	658	395	417	706	458
24	559	480	430	310	380	740	3,080	629	381	449	667	449
25	544	470	390	310	380	820	3,000	589	378	448	719	476
26	530	460	370	310	380	780	2,760	563	375	422	821	703
27	525	460	350	300	370	780	2,490	545	369	408	906	834
28	521	470	340	300	370	780	2,330	529	371	393	944	895
29	511	480	330	300	370	760	2,220	518	379	376	955	1,020
30	496	500	320	300	------	740	2,140	541	376	372	948	1,060
31	509	------	320	300	------	740	------	569	------	361	877	------
TOTAL	16,862	17,932	17,170	9,440	9,800	17,880	51,460	35,345	13,673	12,272	20,440	16,048
MEAN	544	598	554	305	338	577	1,715	1,140	456	396	659	535
MAX	653	896	1,100	330	380	820	3,080	2,210	590	486	1,120	1,060
MIN	433	460	320	300	300	370	620	518	369	316	349	370
CFSM	.80	.88	.82	.45	.50	.85	2.53	1.68	.67	.58	.97	.79
IN.	.93	.98	.94	.52	.54	.98	2.82	1.94	.75	.67	1.12	.88

CAL YR 1971 TOTAL 226,184 MEAN 620 MAX 3,000 MIN 279 CFSM .91 IN 12.41
WTR YR 1972 TOTAL 238,322 MEAN 651 MAX 3,080 MIN 300 CFSM .96 IN 13.08

PEAK DISCHARGE (BASE, 1,500 CFS).--Apr. 23 (2200) 3,100 cfs (5.44 ft).

04072750 Lawrence Creek near Westfield, Wis.

LOCATION.--Lat 43°53'52", long 89°34'43", in SW 1/4 sec.32, T.17 N., R.8 E., Marquette County, on left bank 0.8 mile upstream from Lawrence Lake and 4.0 miles northwest of Westfield.

DRAINAGE AREA.--16 sq mi, approximately (includes approximately 10 sq mi without surface drainage).

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 900 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 66 cfs Aug. 26 (gage height, 8.75 ft); minimum daily, 14 cfs July 25, Aug. 18.

Period of record: Maximum discharge, 66 cfs Aug. 26, 1972 (gage height, 8.75 ft); minimum daily, 12 cfs Jan. 23-26, 28, 31, Feb. 5, 1968.

REMARKS.--Records are fair. Flow includes large ground-water inflow.

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 27, Feb. 2-8.)

Oct. 1 to Mar. 19

7.8	15	8.0	20
7.9	17	8.1	23
		8.2	26

Mar. 20 to Sept. 30

7.7	13	8.0	23
7.8	15	8.2	33
7.9	19	8.4	45

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	19	18	16	15	16	17	18	16	17	15	17
2	17	24	18	16	15	16	17	18	16	17	17	15
3	21	17	18	16	15	16	17	17	16	16	15	15
4	17	17	18	16	15	16	17	17	16	16	15	15
5	17	17	18	16	15	16	17	17	17	15	15	15
6	17	17	18	16	15	17	17	18	16	15	15	15
7	16	17	18	16	15	16	17	17	16	17	15	16
8	17	17	18	16	15	16	17	17	16	16	16	16
9	16	17	18	16	15	16	17	17	16	17	15	16
10	16	17	20	16	15	16	19	17	16	15	15	16
11	16	17	18	16	15	16	19	17	16	15	16	16
12	16	17	18	16	15	15	21	17	18	17	15	16
13	16	17	17	16	16	15	20	18	16	15	15	24
14	16	17	17	15	16	16	18	18	18	15	16	17
15	16	17	22	15	16	16	18	17	16	15	16	16
16	16	18	18	15	16	16	17	17	16	15	15	16
17	16	17	18	15	16	17	17	16	16	16	15	16
18	16	18	17	15	16	17	17	17	16	15	14	31
19	18	17	17	15	16	17	18	17	16	15	16	22
20	17	17	17	15	16	23	17	17	16	15	15	18
21	17	17	17	15	16	22	21	17	16	15	15	18
22	17	17	17	15	16	19	21	17	16	15	15	17
23	16	17	17	15	16	18	18	16	16	16	15	17
24	17	17	17	15	16	17	17	16	16	15	16	17
25	16	17	17	15	16	18	17	16	16	14	18	25
26	16	18	17	15	16	17	17	16	16	18	39	29
27	18	18	16	15	17	17	17	16	15	17	17	18
28	17	18	16	15	18	17	17	16	16	15	16	29
29	17	18	16	15	17	18	17	17	16	15	16	26
30	17	18	16	15	------	18	17	19	15	15	15	18
31	17	------	16	15	------	17	------	17	------	15	16	------
TOTAL	519	526	543	478	456	527	533	527	483	484	504	562
MEAN	16.7	17.5	17.5	15.4	15.7	17.0	17.8	17.0	16.1	15.6	16.3	18.7
MAX	21	24	22	16	18	23	21	19	18	18	39	31
MIN	16	17	16	15	15	15	17	16	15	14	14	15

CAL YR 1971 TOTAL 5,916 MEAN 16.2 MAX 28 MIN 14
WTR YR 1972 TOTAL 6,142 MEAN 16.8 MAX 39 MIN 14

04073050 Grand River near Kingston, Wis.

LOCATION.--Lat 43°41'09", long 89°05'09", between secs.16 and 17, T.14 N., R.12 E., Green Lake County, on left bank just upstream of town road bridge, 1.3 miles upstream and east of Grand Lake and 2.3 miles east of Kingston.

DRAINAGE AREA.--73.7 sq mi.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 795 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 544 cfs Mar. 21 (gage height, 5.78 ft); minimum daily, 7.3 cfs Sept. 10.

Period of record: Maximum discharge, 544 cfs Mar. 21, 1972 (gage height, 5.78 ft); minimum, 2.0 cfs Nov. 28, 1970 (gage height, 1.14 ft), result of freezeup.

REMARKS.--Records good except those for winter period, which are fair. Occasional regulation by mill about 2 miles upstream.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used July 21 to Sept. 30; stage-discharge relation affected by ice Dec. 1, 13-23, Dec. 27 to Feb. 26, Feb. 29 to Mar. 8.)

Oct. 1 to Mar. 17		Mar. 17 to Sept. 30			
1.3	7.3	1.3	6.2	3.0	118
1.5	16	1.5	14	4.0	218
2.0	46	1.7	24	5.0	363
3.0	115	2.0	43	6.0	616
4.0	204				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	18	17	11	12	56	61	25	20	16	27
2	12	30	18	16	11	12	51	62	24	28	15	15
3	12	50	17	16	11	12	51	75	23	37	13	18
4	13	37	17	17	11	12	47	74	21	37	12	16
5	14	29	17	19	11	12	49	51	21	32	12	13
6	13	22	19	18	11	12	58	59	23	26	12	12
7	13	17	22	17	10	13	60	58	22	25	12	11
8	13	16	25	17	9.8	13	51	54	22	23	12	10
9	12	16	46	17	9.6	12	71	50	21	26	13	8.9
10	13	17	24	17	9.6	13	96	45	20	28	15	7.3
11	12	16	49	17	9.6	13	112	42	20	31	19	7.7
12	12	17	51	16	9.6	13	133	43	31	24	24	9.2
13	11	16	40	14	9.6	14	238	36	47	20	25	100
14	11	15	27	12	9.6	16	187	38	40	18	41	84
15	10	16	29	10	10	19	191	57	35	18	100	60
16	10	17	32	10	11	28	152	48	32	17	86	39
17	10	17	50	11	11	120	116	44	31	18	32	27
18	10	20	38	11	11	302	96	37	28	17	32	274
19	11	25	30	10	11	234	85	32	26	18	24	171
20	20	28	24	10	11	316	75	29	25	18	23	142
21	18	26	22	10	11	500	79	27	25	19	16	166
22	16	23	20	11	11	484	138	25	24	20	8.5	151
23	16	17	19	11	11	391	123	24	23	19	8.1	122
24	16	17	19	11	11	267	118	22	22	18	11	101
25	17	16	19	11	11	174	101	21	22	18	25	151
26	15	18	19	11	12	132	82	20	21	19	58	227
27	14	18	19	10	13	89	69	19	21	19	46	176
28	14	19	19	10	12	87	61	19	20	18	37	157
29	13	21	19	10	12	70	52	19	20	17	27	161
30	13	19	19	10	------	45	44	23	20	17	22	146
31	13	------	18	11	------	58	------	26	------	17	21	------
TOTAL	410	631	805	408	312.4	3,495	2,842	1,240	755	682	817.6	2,610.1
MEAN	13.2	21.0	26.0	13.2	10.8	113	94.7	40.0	25.2	22.0	26.4	87.0
MAX	20	50	51	19	13	500	238	75	47	37	100	274
MIN	10	15	17	10	9.6	12	44	19	20	17	8.1	7.3
CFSM	.18	.28	.35	.18	.15	1.53	1.28	.54	.34	.30	.36	1.18
IN.	.21	.32	.41	.21	.16	1.76	1.43	.63	.38	.34	.41	1.32

CAL YR 1971 TOTAL 12,830.3 MEAN 35.2 MAX 362 MIN 5.1 CFSM .48 IN 6.48
WTR YR 1972 TOTAL 15,008.1 MEAN 41.0 MAX 500 MIN 7.3 CFSM .56 IN 7.58

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	0200	5.78	544	8-16	1800	3.91	178
4-13	0900	4.48	281	9-18	1200	5.45	351
4-22	0700	3.39	153	9-26	0700	4.72	247

NOTE.--No gage-height record Oct. 1 to Nov. 11.

04073500 Fox River at Berlin, Wis.

LOCATION.--Lat 43°57'14", long 88°57'08", in NE 1/4 sec.16, T.17 N., R.13 E., Green Lake County, on left bank, 0.4 mile downstream from government dam, 1.0 mile south of Huron Street bridge in Berlin, 2.5 miles upstream from Barnes Creek, and at mile 89.0.

DRAINAGE AREA.--1,430 sq mi, approximately.

PERIOD OF RECORD.--January 1898 to current year.

GAGE.--Water-stage recorder. Datum of gage is 744.52 ft above mean tide at New York City (by Corps of Engineers). Prior to Oct. 27, 1954, nonrecording gage at site 0.3 mile upstream at same datum.

AVERAGE DISCHARGE.--74 years, 1,075 cfs (10.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,440 cfs Apr. 1 (gage height, 12.83 ft); minimum, 492 cfs May 29 (gage height, 7.82 ft).

Period of record: Maximum discharge, 6,900 cfs Mar. 17, 18, 1946 (gage height, 15.5 ft); minimum observed, 248 cfs Sept. 16, 1948 (gage height, 6.1 ft).

REMARKS.--Records good except those for winter period, which are fair. Usually less than about 5 cfs was diverted into the basin from the Wisconsin River at Portage Canal throughout the year.

REVISIONS.--WSP 1337: 1910.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 2-7, Dec. 20 to Mar. 16.)

7.8	485	11.0	2,160
8.0	560	13.0	3,600
9.0	1,020		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	557	711	894	900	560	540	3,420	2,190	688	581	588	1,510
2	571	729	860	880	580	540	3,350	2,170	717	646	650	1,550
3	577	783	840	860	580	560	3,100	2,140	716	649	665	1,570
4	586	928	820	840	560	560	2,830	2,080	677	644	655	1,580
5	584	1,000	840	800	540	560	2,610	2,040	625	633	664	1,570
6	576	1,010	860	800	540	560	2,450	2,010	608	627	663	1,560
7	572	950	880	800	540	540	2,320	1,970	590	614	648	1,550
8	601	858	903	800	540	540	2,240	1,920	588	606	651	1,530
9	618	849	931	820	540	540	2,180	1,860	584	623	660	1,500
10	618	864	969	820	540	540	2,150	1,800	510	623	662	1,470
11	612	958	1,040	800	540	560	2,130	1,750	507	635	676	1,460
12	595	982	1,070	760	520	580	2,130	1,690	560	637	673	1,440
13	609	955	978	700	520	620	2,220	1,650	606	631	653	1,470
14	590	918	945	680	520	680	2,270	1,630	689	606	657	1,490
15	611	907	1,180	660	520	800	2,320	1,580	786	609	704	1,500
16	596	883	1,310	640	520	1,000	2,360	1,460	800	580	762	1,500
17	573	873	1,360	620	540	1,190	2,380	1,400	804	582	816	1,520
18	602	890	1,220	620	540	1,340	2,370	1,280	799	614	836	1,650
19	634	899	1,150	620	540	1,490	2,360	1,150	786	601	844	1,710
20	672	914	1,100	600	540	1,630	2,330	1,080	805	616	975	1,770
21	680	838	1,100	580	540	1,840	2,310	1,010	749	631	1,030	1,850
22	692	762	1,100	560	520	2,060	2,400	973	716	615	1,040	1,890
23	677	756	1,200	560	520	2,260	2,430	929	687	605	1,030	1,910
24	661	849	1,200	540	520	2,550	2,430	882	667	596	1,050	1,940
25	676	884	1,200	540	520	2,760	2,420	831	671	561	1,080	2,000
26	682	929	1,100	540	540	2,870	2,400	761	664	567	1,150	2,100
27	688	936	1,100	540	540	2,920	2,370	600	663	589	1,220	2,150
28	729	917	1,000	540	540	2,950	2,330	520	641	598	1,280	2,200
29	681	935	1,000	540	540	3,010	2,290	504	611	600	1,340	2,250
30	637	887	960	540	------	3,100	2,240	578	588	596	1,390	2,300
31	677	------	940	560	------	3,310	------	643	------	589	1,430	------
TOTAL	19,434	26,554	32,070	21,060	15,600	45,000	73,140	43,081	20,102	18,904	27,142	51,490
MEAN	627	885	1,035	679	538	1,452	2,438	1,390	670	610	876	1,716
MAX	729	1,010	1,360	900	580	3,310	3,420	2,190	805	649	1,430	2,300
MIN	557	711	820	540	520	540	2,130	504	507	561	588	1,440
CFSM	.44	.62	.72	.47	.38	1.02	1.70	.97	.47	.43	.61	1.20
IN.	.51	.69	.83	.55	.41	1.17	1.90	1.12	.52	.49	.71	1.34

CAL YR 1971 TOTAL 398,083 MEAN 1,091 MAX 4,200 MIN 376 CFSM .76 IN 10.36
WTR YR 1972 TOTAL 393,577 MEAN 1,075 MAX 3,420 MIN 504 CFSM .75 IN 10.24

04074950 Wolf River at Langlade, Wis.

LOCATION.--Lat 45°11'24", long 88°44'00", between secs.3 and 10, T.31 N., R.14 E., Langlade County, near left bank on upstream side of bridge handrail, on State Highway 64 at Langlade, 1.5 miles east of White Lake, 3.0 miles upstream from White Lake Creek, and at about mile 170 above mouth.

DRAINAGE AREA.--460 sq mi.

PERIOD OF RECORD.--March 1966 to current year.

GAGE.--Nonrecording gage. Altitude of gage is about 1,240 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 466 cfs (13.76 inches per year).

EXTREMES.--Current year: Maximum discharge observed, 1,770 cfs May 2 (gage height, 9.23 ft); maximum gage height observed, 9.60 ft Dec. 28 (backwater from ice); minimum discharge observed, 220 cfs July 7 (gage height, 7.45 ft).

Period of record: Maximum discharge observed, 1,770 cfs May 2, 1972 (gage height, 9.23 ft); maximum gage height observed, 9.98 ft Dec. 5, 1968 (backwater from ice); minimum discharge observed, 156 cfs Aug. 27, 29, 1970.

REMARKS.--Records good except those for winter months, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Nov. 25 to Dec. 6, Dec. 10 to Apr. 11.)

7.2	142	8.5	930
7.5	260	9.0	1,440
8.0	540	9.5	2,230

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	452	410	480	330	280	470	1,660	399	256	303	912
2	405	521	390	450	320	280	420	1,770	366	251	303	608
3	464	560	390	430	320	280	400	1,720	355	242	303	540
4	601	574	390	420	320	280	370	1,650	339	242	298	527
5	666	560	380	410	320	280	360	1,500	329	242	284	514
6	719	527	370	390	320	280	360	1,430	329	234	270	482
7	727	508	360	380	310	290	360	1,320	324	220	350	476
8	758	508	350	370	310	300	370	1,210	313	260	394	458
9	758	476	350	360	310	310	380	1,160	303	260	495	446
10	711	452	370	360	300	320	400	1,080	313	256	527	446
11	680	434	450	350	300	340	420	1,000	303	251	514	446
12	615	422	370	340	300	360	446	939	355	289	428	476
13	514	410	370	340	300	370	482	877	434	298	366	470
14	476	410	380	340	300	380	527	934	410	298	339	458
15	458	410	400	340	300	390	601	842	394	313	324	446
16	446	399	420	340	290	400	719	800	366	324	547	428
17	428	334	480	350	290	400	877	719	344	329	912	422
18	446	405	430	360	290	400	1,000	608	324	329	948	422
19	540	394	420	360	290	400	1,140	540	308	324	957	440
20	594	382	430	360	280	400	1,240	534	303	318	877	434
21	622	355	460	350	280	390	1,440	574	318	339	895	527
22	608	334	470	350	280	380	1,440	574	298	355	886	581
23	601	399	420	350	280	360	1,440	547	279	382	895	560
24	601	366	420	340	280	350	1,470	527	270	388	1,030	547
25	594	370	420	340	280	350	1,520	508	270	355	1,000	637
26	581	390	440	340	280	350	1,560	428	265	344	939	817
27	581	410	450	340	280	360	1,600	428	242	344	886	1,040
28	567	450	470	340	280	390	1,660	422	242	334	851	1,210
29	534	440	500	330	280	450	1,720	416	279	318	851	1,380
30	534	460	580	330	------	560	1,700	470	274	308	834	1,400
31	470	------	520	330	------	520	------	416	------	284	783	------
TOTAL	17,649	13,112	13,060	11,270	8,620	11,200	26,892	27,503	9,648	9,287	19,589	18,550
MEAN	569	437	421	364	297	361	896	887	322	300	632	618
MAX	758	574	580	480	330	560	1,720	1,770	434	388	1,030	1,400
MIN	350	334	350	330	280	280	360	416	242	220	270	422
CFSM	1.24	.95	.92	.79	.65	.78	1.95	1.93	.70	.65	1.37	1.34
IN.	1.43	1.06	1.06	.91	.70	.91	2.17	2.22	.78	.75	1.58	1.50

CAL YR 1971 TOTAL 165,432 MEAN 453 MAX 1,700 MIN 180 CFSM .98 IN 13.38
WTR YR 1972 TOTAL 186,380 MEAN 509 MAX 1,770 MIN 220 CFSM 1.11 IN 15.07

04075200 Evergreen Creek near Langlade, Wis.

LOCATION.--Lat 45°10'11", long 88°48'12", in NW 1/4 sec.18, T.31 N., R.14 E., Langlade County, on right bank 30 ft upstream from culvert on State Highway 64, 0.1 mile downstream from Town Line Lake outlet, 2.5 miles upstream from mouth, 3.8 miles southwest of Langlade.

DRAINAGE AREA.--8.0 sq mi, approximately, of which about 4.9 sq mi contributes directly to surface runoff (revised).

PERIOD OF RECORD.--Annual maximum, water years 1959-64, and occasional low-flow measurements, water years 1961-64. June 1964 to current year (no winter record 1964-67).

GAGE.--Water-stage recorder. Altitude of gage is 1,320 ft (from topographic map). Prior to June 16, 1964, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--5 years, 11.3 cfs.

EXTREMES.--Current year: Maximum discharge, 31 cfs Aug. 8 (gage height, 10.42 ft); minimum, 8.1 cfs Feb. 26-29, Mar. 17-19 (gage height, 9.61 ft).

Period of record: Maximum discharge, 78 cfs Apr. 11, 1965 (gage height, 11.62 ft); minimum recorded, 6.1 cfs Mar. 14, 1971 (gage height, 9.45 ft).

REMARKS.--Records good except those for winter months, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 1, 2, 4, 11, 13, 28, Jan. 12 to Feb. 25, Mar. 1-12, 23, 24.)

9.5	6.5	10.3	26
9.9	14	10.8	43

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	13	12	11	9.2	8.6	8.7	20	12	12	16	13
2	14	19	11	12	9.2	9.4	8.7	21	12	12	12	12
3	18	14	11	9.4	9.2	9.2	8.7	18	12	12	12	12
4	14	12	12	12	9.2	9.2	8.7	16	12	12	12	12
5	12	12	11	11	9.0	9.2	11	14	12	12	12	13
6	12	11	11	11	9.0	9.2	8.5	14	12	12	12	12
7	11	11	11	11	8.8	9.0	9.4	13	12	13	14	12
8	12	11	11	11	8.8	9.0	9.4	13	12	13	23	12
9	12	11	11	11	8.8	8.8	8.9	12	12	13	19	12
10	12	11	12	9.2	8.8	8.8	9.4	12	12	13	13	12
11	12	11	11	9.2	8.6	8.8	9.8	12	12	15	13	13
12	11	11	10	9.2	8.6	8.6	10	12	13	15	12	13
13	12	11	12	9.2	8.5	8.5	13	12	13	13	12	12
14	11	11	10	9.2	8.5	8.3	13	13	13	17	12	12
15	11	11	14	9.2	8.5	8.3	18	12	13	16	12	12
16	11	11	12	9.2	8.6	8.3	18	12	13	12	20	12
17	11	11	12	9.2	8.6	8.1	20	12	12	13	24	12
18	11	13	12	9.4	8.6	8.1	20	12	12	13	20	12
19	15	12	13	9.4	8.6	8.1	27	11	12	12	16	12
20	14	12	12	9.2	8.6	8.3	23	11	12	12	14	12
21	12	11	11	9.2	8.4	9.2	20	12	12	12	14	14
22	12	11	12	9.2	8.4	9.0	19	11	12	12	15	12
23	12	10	9.6	9.2	8.2	10	19	11	12	13	13	12
24	12	10	10	9.4	8.2	9.0	19	11	12	12	24	12
25	12	10	11	9.4	8.2	8.5	18	11	12	12	17	18
26	12	11	11	9.4	8.1	8.5	18	11	12	12	23	26
27	12	11	11	9.3	8.1	8.5	19	11	12	12	23	18
28	12	10	12	9.2	8.1	8.5	20	11	13	12	15	19
29	11	10	11	9.2	8.1	8.7	19	12	13	12	13	23
30	12	10	12	9.2	------	8.7	19	14	12	13	13	16
31	14	------	12	9.2	------	8.7	------	12	------	16	13	------
TOTAL	383	343	353.6	302.9	249.5	271.1	453.2	399	367	400	483	414
MEAN	12.4	11.4	11.4	9.77	8.60	8.75	15.1	12.9	12.2	12.9	15.6	13.8
MAX	18	19	14	12	9.2	10	27	21	13	17	24	26
MIN	11	10	9.6	9.2	8.1	8.1	8.5	11	12	12	12	12

CAL YR 1971 TOTAL 4,059.5 MEAN 11.1 MAX 22 MIN 7.2
WTR YR 1972 TCTAL 4,419.3 MEAN 12.1 MAX 27 MIN 8.1

04077000 Wolf River at Keshena Falls, Wis.

LOCATION.--Lat 44°53'28", long 88°39'18", in E 1/2 sec.22, T.28 N., R.15 E., Menominee County, on right bank 500 ft downstream from Keshena Falls, 1.7 miles upstream from Keshena, 3.1 miles downstream from West Branch Wolf River, and at mile 136.4.

DRAINAGE AREA.--812 sq mi.

PERIOD OF RECORD.--May 1907 to March 1909, October 1910 to current year. Monthly discharge only for some periods, published in WSP 1307. Published as "at Keshena" prior to April 1928.

GAGE.--Water-stage recorder. Datum of gage is 820.0 ft above mean sea level (levels by Wisconsin Power and Light Co.). Prior to Mar. 23, 1928, nonrecording gage at bridge in Keshena 1.7 miles downstream at datum 4.03 ft lower.

AVERAGE DISCHARGE.--63 years (1907-8, 1910-72), 756 cfs (12.64 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,780 cfs Apr. 22 (gage height, 7.88 ft); maximum gage height, 9.44 ft Dec. 1 (backwater from ice); minimum daily discharge, 410 cfs July 6, 7.

Period of record: Maximum discharge, 4,830 cfs May 7, 1960 (gage height, 9.67 ft) from rating curve extended above 3,300 cfs; instantaneous peak caused when earth fill wall near powerplant was dynamited to relieve pressure on dam; maximum discharge after flow stabilized, 4,330 cfs May 8 (gage height, 9.36 ft) from rating curve extended above 3,300 cfs; maximum gage height, 13.83 ft Nov. 17, 1943 (backwater from ice); minimum, 91 cfs Dec. 22, 1939 (gage height, 4.67 ft), result of ice storage.

REMARKS.--Records good except those for winter months and those for period of no gage-height record, which are fair.

REVISIONS (WATER YEARS).--WSP 664: Drainage area (site at Keshena). WSP 1337: 1914-15(M), 1918-19(M), 1921, 1923(M), 1926(M), 1928(M), 1933.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Apr. 15-25; stage-discharge relation affected by ice Nov. 29 to Apr. 12.)

5.0	229	7.0	1,740
5.5	488	8.0	2,800
6.0	842		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	919	746	1,500	720	560	480	640	2,510	816	470	480	1,100
2	813	1,030	1,400	700	560	480	620	2,650	739	450	540	1,100
3	841	1,130	1,300	700	560	470	620	2,580	710	450	540	1,000
4	957	1,060	1,200	700	560	470	600	2,400	681	430	520	920
5	1,030	986	1,100	680	560	490	600	2,210	661	420	480	820
6	1,040	925	1,100	680	560	520	600	2,040	653	410	460	740
7	1,070	819	1,100	680	540	540	600	1,910	636	410	450	680
8	1,100	722	1,000	660	540	580	620	1,790	607	420	520	640
9	1,090	802	1,000	640	540	600	660	1,680	588	440	600	600
10	1,050	757	1,000	640	540	600	720	1,590	553	470	700	580
11	999	732	1,300	640	520	620	760	1,500	535	500	780	580
12	942	712	1,100	620	520	620	840	1,390	551	520	740	580
13	855	694	1,000	620	520	640	924	1,340	626	540	680	580
14	765	682	980	600	520	640	1,030	1,340	691	540	620	560
15	717	675	960	600	500	640	1,270	1,310	690	560	540	540
16	690	671	1,200	620	500	640	1,570	1,270	638	580	660	520
17	677	655	1,100	620	500	640	1,760	1,210	587	620	900	490
18	673	652	1,000	620	500	620	1,860	1,100	550	580	1,100	490
19	693	711	980	620	490	620	2,180	978	533	540	1,300	490
20	893	726	960	620	490	620	2,430	908	546	560	1,400	520
21	938	691	940	620	490	600	2,470	921	540	560	1,400	540
22	972	560	900	620	490	600	2,720	944	531	540	1,200	560
23	928	488	860	600	490	580	2,600	911	495	520	1,000	580
24	889	599	820	600	480	560	2,480	835	480	560	860	580
25	899	594	780	600	480	560	2,430	828	473	600	940	700
26	880	607	780	600	480	540	2,410	792	464	600	1,000	900
27	869	576	760	600	480	520	2,440	726	455	580	1,100	1,100
28	844	727	740	600	480	520	2,510	705	448	560	1,200	1,300
29	796	800	720	580	480	540	2,550	717	480	520	1,300	1,500
30	781	1,800	720	580	------	600	2,520	823	490	490	1,200	1,600
31	803	------	720	580	------	660	------	860	------	470	1,200	------
TOTAL	27,413	23,329	31,020	19,560	14,930	17,810	46,034	42,768	17,447	15,910	26,410	22,890
MEAN	884	778	1,001	631	515	575	1,534	1,380	582	513	852	763
MAX	1,100	1,800	1,500	720	560	660	2,720	2,650	816	620	1,400	1,600
MIN	673	488	720	580	480	470	600	705	448	410	450	490
CFSM	1.09	.96	1.23	.78	.63	.71	1.89	1.70	.72	.63	1.05	.94
IN.	1.26	1.07	1.42	.90	.68	.82	2.11	1.96	.80	.73	1.21	1.05

CAL YR 1971 TOTAL 290,242 MEAN 795 MAX 2,530 MIN 400 CFSM .98 IN 13.30
WTR YR 1972 TOTAL 305,521 MEAN 835 MAX 2,720 MIN 410 CFSM 1.03 IN 14.00

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-1	-	-	a2,000	9-30	-	-	a1,600
4-22	1400	7.88	2,780				

NOTE.--No gage-height record June 29 to Sept. 30.

a About.

04078500 Embarrass River near Embarrass, Wis.

LOCATION.--Lat 44°43'29", long 88°44'10", in SW 1/4 sec.18, T.26 N., R.15 E., Shawano County, on left bank 10 ft downstream from bridge on county road, 1.3 miles downstream from Mill Creek, and 4.0 miles northwest of Embarrass.

DRAINAGE AREA.--395 sq mi.

PERIOD OF RECORD.--June 1919 to current year.

GAGE.--Water-stage recorder. Datum of gage is 803.95 ft above mean sea level. Prior to Aug. 23, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--53 years, 287 cfs (9.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,160 cfs Apr. 20 (gage height, 8.20 ft); minimum, 118 cfs July 5, 6 (gage height, 2.85 ft).
Period of record: Maximum discharge, 7,080 cfs Apr. 12, 1965 (gage height, 12.13 ft), affected by failure of dam near Pella, 9.2 miles above station; minimum observed, 23 cfs Aug. 3, 6, 7, 1931.

REMARKS.--Records good except those for winter months, which are fair. Slight diurnal fluctuation caused by powerplants above station.

REVISIONS (WATER YEARS).--WSP 1337: 1920-26(M), 1928, 1929-30(M), 1933-34, 1936-37, 1938(M), 1940.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Nov. 28 to Dec. 4, Dec. 7 to Apr. 2.)

2.8	104	5.0	1,140
3.0	151	7.0	2,340
3.4	290	9.0	3,760
4.0	589		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526	259	210	210	150	140	320	995	225	136	170	404
2	554	509	220	200	150	140	310	1,020	206	130	182	270
3	550	788	240	190	150	140	301	1,050	188	125	177	253
4	516	772	210	180	150	140	309	936	174	122	164	238
5	496	655	206	170	150	130	283	828	166	119	148	230
6	443	492	212	170	140	140	266	712	162	118	136	220
7	378	360	210	160	140	150	291	517	161	125	133	220
8	300	271	230	160	140	160	286	515	155	132	143	210
9	277	280	240	150	140	190	262	454	152	144	168	200
10	260	259	260	150	140	200	282	413	149	145	198	190
11	242	247	280	140	140	220	431	387	154	153	215	200
12	217	239	400	140	140	230	699	361	177	161	194	220
13	209	236	290	140	130	240	820	343	217	188	170	200
14	204	232	310	130	130	250	940	350	285	194	154	190
15	199	228	330	130	130	260	1,310	364	297	184	144	180
16	193	226	370	130	130	270	1,720	390	265	189	153	180
17	187	227	420	130	130	270	2,020	427	215	185	255	180
18	181	248	520	130	130	280	2,400	373	188	166	341	180
19	195	294	600	140	140	270	2,750	329	166	159	592	180
20	243	326	400	140	140	260	3,090	295	164	165	654	190
21	302	321	370	140	150	260	2,670	277	160	162	614	270
22	316	269	350	140	140	300	2,540	264	155	156	402	360
23	290	227	320	140	140	350	2,380	238	146	148	249	300
24	263	224	310	140	150	410	2,020	224	140	139	395	270
25	249	216	290	150	150	390	1,670	201	133	133	781	500
26	238	219	280	150	140	380	1,430	200	132	133	1,030	900
27	231	192	260	150	140	370	1,280	197	132	136	1,240	1,500
28	224	200	250	150	140	360	1,140	191	132	140	1,350	1,300
29	217	200	240	150	150	350	1,080	189	133	142	1,180	1,700
30	211	210	230	150	------	340	1,010	207	139	142	883	1,200
31	223	------	220	150	------	350	------	231	------	143	530	------
TOTAL	9,134	9,426	9,278	4,700	4,090	7,940	36,310	13,438	5,268	4,614	13,145	12,635
MEAN	295	314	299	152	141	256	1,210	433	176	149	424	421
MAX	554	788	600	210	150	410	3,090	1,050	297	194	1,350	1,700
MIN	181	192	206	130	130	130	262	189	132	118	133	180
CFSM	.75	.79	.76	.38	.36	.65	3.06	1.10	.45	.38	1.07	1.07
IN.	.86	.89	.87	.44	.39	.75	3.42	1.27	.50	.43	1.24	1.19

CAL YR 1971 TOTAL 118,658 MEAN 325 MAX 2,780 MIN 118 CFSM .82 IN 11.17
WTR YR 1972 TOTAL 129,978 MEAN 355 MAX 3,090 MIN 118 CFSM .90 IN 12.24

04079000 Wolf River at New London, Wis.

LOCATION.--Lat 44°23'32", long 88°44'25", in NE 1/4 SE 1/4 sec.12, T.22 N., R.14 E., Waupaca County, on right bank 100 ft downstream from Pearl Street bridge in New London, 0.2 mile downstream from Embarrass River, and at mile 56.3.

DRAINAGE AREA.--2,240 sq mi, approximately.

PERIOD OF RECORD.--March 1896 to current year. Prior to October 1913 monthly discharges only, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 749.0 ft above mean sea level (levels by Corps of Engineers). Prior to October 4, 1951, nonrecording gage.

AVERAGE DISCHARGE.--76 years, 1,710 cfs (10.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,300 cfs Apr. 25 (gage height, 9.76 ft); minimum daily, 800 cfs Feb. 28 to Mar. 5.

Period of record: Maximum daily discharge, 15,500 cfs Apr. 13, 1922 (gage height, 11.4 ft); minimum daily, 150 cfs Mar. 1, 1900.

Maximum stage known, 11.6 ft Apr. 16, 1888, from information by Corps of Engineers.

REMARKS.--Records good except those for winter periods, which are fair.

REVISIONS (WATER YEARS).--WSP 1114: 1943(M). WSP 1337: 1931.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used May 23 to June 17, Sept. 26-30; stage-discharge relation affected by ice Nov. 29 to Apr. 10.)

0.5	610	6.0	2,920
1.0	762	8.0	5,080
2.0	1,080	9.0	7,630
4.0	1,800	10.0	11,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,310	1,460	1,200	1,400	1,100	800	2,300	7,060	1,350	1,010	1,050	2,800
2	1,450	1,550	1,200	1,400	1,100	800	2,300	6,740	1,350	987	1,050	2,850
3	1,540	1,680	1,200	1,400	1,100	800	2,200	6,460	1,330	983	1,050	2,850
4	1,590	1,830	1,300	1,400	1,100	800	2,200	6,240	1,310	973	1,050	2,770
5	1,620	1,980	1,300	1,300	1,100	800	2,200	6,020	1,270	955	1,040	2,590
6	1,630	2,070	1,300	1,300	1,100	820	2,300	5,850	1,220	944	997	2,420
7	1,610	2,090	1,400	1,300	1,100	820	2,400	5,660	1,160	940	978	2,220
8	1,590	2,060	1,500	1,200	1,100	820	2,700	5,450	1,130	924	980	2,010
9	1,570	1,990	1,500	1,200	1,100	820	2,900	5,190	1,100	931	980	1,780
10	1,540	1,970	1,500	1,200	1,100	840	3,100	4,880	1,070	977	1,010	1,570
11	1,530	1,720	1,500	1,200	1,100	860	3,300	4,560	1,060	1,000	1,090	1,450
12	1,510	1,630	1,500	1,200	1,100	860	3,580	4,220	1,080	1,010	1,170	1,410
13	1,510	1,570	1,500	1,200	1,100	860	3,960	3,940	1,130	1,020	1,210	1,430
14	1,480	1,560	1,500	1,100	1,000	860	4,350	3,730	1,230	1,050	1,210	1,430
15	1,450	1,570	1,600	1,100	1,000	880	4,670	3,580	1,330	1,130	1,180	1,410
16	1,390	1,540	1,600	1,100	1,000	880	4,920	3,440	1,400	1,140	1,130	1,370
17	1,320	1,480	1,700	1,100	1,000	900	5,180	3,310	1,430	1,160	1,090	1,330
18	1,280	1,460	1,700	1,100	980	920	5,510	3,190	1,420	1,170	1,160	1,340
19	1,280	1,470	1,700	1,100	960	940	6,000	3,050	1,350	1,140	1,400	1,360
20	1,300	1,490	1,700	1,100	920	980	6,710	2,880	1,280	1,130	1,560	1,410
21	1,320	1,500	1,700	1,100	900	1,000	7,610	2,730	1,190	1,100	1,760	1,440
22	1,410	1,500	1,600	1,100	880	1,100	8,690	2,580	1,150	1,110	1,830	1,420
23	1,490	1,490	1,600	1,100	860	1,100	9,560	2,390	1,120	1,100	1,890	1,400
24	1,530	1,450	1,600	1,100	840	1,200	10,100	2,220	1,090	1,060	1,970	1,390
25	1,550	1,390	1,600	1,100	820	1,300	10,200	2,060	1,080	1,040	2,020	1,480
26	1,550	1,340	1,600	1,100	820	1,500	10,100	1,860	1,070	1,030	2,240	2,000
27	1,540	1,320	1,600	1,100	820	1,600	9,990	1,710	1,050	1,060	2,500	2,440
28	1,520	1,240	1,600	1,100	800	1,800	8,930	1,570	1,040	1,070	2,630	2,800
29	1,480	1,200	1,500	1,100	800	2,000	8,220	1,470	1,010	1,080	2,730	3,270
30	1,450	1,200	1,500	1,100	------	2,200	7,540	1,390	1,010	1,080	2,780	3,510
31	1,460	------	1,400	1,100	------	2,300	------	1,340	------	1,070	2,770	------
TOTAL	45,800	47,690	46,700	36,500	28,700	34,160	163,320	116,770	35,810	32,374	47,505	58,950
MEAN	1,477	1,590	1,506	1,177	990	1,102	5,444	3,767	1,194	1,044	1,532	1,965
MAX	1,630	2,090	1,700	1,400	1,100	2,300	10,200	7,060	1,430	1,170	2,780	3,510
MIN	1,280	1,200	1,200	1,100	800	800	2,200	1,340	1,010	924	978	1,330
CFSM	.66	.71	.67	.53	.44	.49	2.43	1.68	.53	.47	.68	.88
IN.	.76	.79	.78	.61	.48	.57	2.71	1.94	.59	.54	.79	.98

CAL YR 1971 TOTAL 675,395 MEAN 1,850 MAX 9,980 MIN 840 CFSM .83 IN 11.22
WTR YR 1972 TOTAL 694,279 MEAN 1,897 MAX 10,200 MIN 800 CFSM .85 IN 11.53

04080950 Emmons Creek near Rural, Wis.

LOCATION.--Lat 44°18'55", long 89°11'34", in NW 1/4 NE 1/4 sec.8, T.21 N., R.11 E., Waupaca County, 0.8 mile upstream from Long Lake and 1.8 miles west of Rural.

DRAINAGE AREA.--27 sq mi, approximately; the ground-water drainage area is about one-third larger than the surface-water drainage area.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Nonrecording gage and crest-stage gage. Altitude of gage is 890 ft (by barometer).

EXTREMES.--Current year: Maximum discharge, 54 cfs Aug. 26 (gage height, 3.13 ft, from graph based on gage readings); minimum daily, 21 cfs July 25.

Period of record: Maximum discharge, 142 cfs May 27, 1969 (gage height, 4.28 ft); minimum, 21 cfs Aug. 30, 1969, Feb. 14, Aug. 3, 8, 10, 15-17, 20-28, 1970, July 25, 1972.

REMARKS.--Records good.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 30, 31, Jan. 14-18, Jan. 25 to Feb. 1, Feb. 3, 6, 8-11, Mar. 2, 3, 5, 6, 8-10.)

2.1	20	3.0	48
2.5	32	3.1	52

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	27	27	25	24	24	27	28	24	23	22	27
2	26	38	26	25	24	24	27	28	24	23	24	24
3	29	29	26	24	24	24	27	28	24	23	22	24
4	27	28	26	27	24	24	26	27	24	23	22	24
5	26	28	27	25	24	24	27	27	24	23	22	24
6	27	28	27	27	24	24	27	27	24	23	22	24
7	26	26	27	25	24	24	27	27	24	23	26	24
8	27	26	28	25	24	24	27	27	24	23	25	24
9	26	27	28	25	24	24	27	27	24	23	23	24
10	26	28	30	25	24	34	28	27	23	22	23	24
11	26	27	29	25	24	24	31	26	23	22	24	25
12	26	26	28	25	24	27	31	26	26	22	23	24
13	26	26	27	24	24	24	34	27	24	22	22	28
14	26	27	27	24	24	25	31	27	27	24	22	26
15	26	27	36	23	24	25	32	27	24	23	23	24
16	26	28	29	23	24	25	31	27	24	22	23	24
17	26	27	28	24	24	25	30	26	24	22	23	24
18	26	31	28	24	24	26	30	26	24	22	23	34
19	27	28	27	24	23	26	29	26	23	24	26	27
20	26	28	27	24	23	26	29	26	23	24	24	26
21	26	27	27	24	23	29	30	26	23	24	23	26
22	26	26	26	24	23	30	36	25	23	22	24	26
23	26	26	26	24	23	30	30	25	23	22	24	25
24	26	27	27	24	24	27	29	25	23	22	29	25
25	26	27	26	24	23	27	28	25	23	21	26	43
26	26	28	26	23	23	27	28	25	23	22	50	46
27	26	28	26	23	23	27	28	25	23	23	29	28
28	26	27	25	23	24	27	27	24	24	22	25	27
29	26	28	25	23	23	27	27	25	23	22	25	33
30	27	27	25	23	------	27	27	27	23	23	25	29
31	28	------	25	23	------	27	------	25	------	22	25	------
TOTAL	816	831	842	751	687	808	868	814	712	701	769	813
MEAN	26.3	27.7	27.2	24.2	23.7	26.1	28.9	26.3	23.7	22.6	24.8	27.1
MAX	29	38	36	27	24	34	36	28	27	24	50	46
MIN	26	26	25	23	23	24	26	24	23	21	22	24
CFSM	.97	1.03	1.01	.90	.88	.97	1.07	.97	.88	.84	.92	1.00
IN.	1.12	1.14	1.16	1.03	.95	1.11	1.20	1.12	.98	.97	1.06	1.12

CAL YR 1971 TOTAL 9,596 MEAN 26.3 MAX 56 MIN 23 CFSM .97 IN 13.22
WTR YR 1972 TOTAL 9,412 MEAN 25.7 MAX 50 MIN 21 CFSM .95 IN 12.97

04082500 Lake Winnebago at Oshkosh, Wis.

LOCATION.--Lat 44°00'41", long 88°32'01", in SW 1/4 sec.24, T.18 N., R.16 E., Winnebago County, in mouth of the Upper Fox River at Chicago and North Western Railway bridge, 0.2 mile downstream from Main Street Bridge in Oshkosh and 18 miles south of Menasha Dam and outlet.

DRAINAGE AREA.--6,030 sq mi, approximately, at lake outlet at Menasha Dam.

PERIOD OF RECORD.--October 1938 to current year in reports of Geological Survey. Records from 1857 to 1938 in files of Corps of Engineers. A report on Fox River by Corps of Engineers, published as House Document No. 146, 67th Congress, 2nd session, contains semi-monthly records of inflow of Lake Winnebago for the period 1896-1917.

GAGE.--Nonrecording gage read once daily. Datum of gage is 745.05 ft above mean tide at New York City (levels by Corps of Engineers). Prior to 1882, lake levels were referred to Deuchman gage at Lake outlet of Menasha Dam. Datum of Deuchman gage, which is still in existence, is 745.00 ft above mean tide at New York City.

EXTREMES.--Current year: Maximum gage height observed, 3.30 ft Sept. 1; minimum observed, 0.94 ft Mar. 19, 20. Period of record: Maximum gage height observed, 5.33 ft (Deuchman gage) Nov. 8, 1881, minimum observed, -2.00 ft (Deuchman gage) Nov. 28, 1891.

REMARKS.--Lake elevations controlled by dams at Menasha and Neenah, which are operated in the interest of navigation. Crests of both dams are at elevation 746.73 ft. Present limits of regulation are from 21 1/4 in. above the crest of Menasha Dam to crest during navigation season, plus additional 18 in. below crest during winter. Oshkosh staff gage gives true level of lake, while Deuchman gage readings are affected by loss of head in the channel between lake and dam.

COOPERATION.--Records furnished by Corps of Engineers.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.51	2.82	2.71	2.69	1.96	1.44	1.27	2.89	3.13	2.88	2.84	3.30
2	2.54	2.79	2.67	2.69	2.05	1.44	1.29	2.92	3.14	3.04	2.80	3.24
3	2.57	3.02	2.64	2.66	2.02	1.47	1.30	2.99	3.08	2.92	2.88	3.16
4	2.53	2.97	2.61	2.63	2.00	1.52	1.38	3.00	3.18	2.95	2.83	3.09
5	2.53	2.86	2.63	2.62	1.99	1.46	1.40	3.02	3.12	2.88	2.79	3.06
6	2.51	2.68	2.60	2.60	1.94	1.46	1.44	3.02	3.15	2.89	2.82	3.06
7	2.53	2.84	2.59	2.60	1.91	1.38	1.44	3.03	3.12	2.87	2.84	2.99
8	2.52	2.86	2.60	2.56	1.90	1.34	1.49	3.00	3.10	2.90	2.84	2.98
9	2.56	2.78	2.57	2.54	1.90	1.32	1.54	2.96	3.13	2.87	2.80	2.94
10	2.60	2.86	2.63	2.50	1.86	1.28	1.54	2.95	3.04	2.90	2.78	2.90
11	2.62	2.82	2.64	2.54	1.82	1.20	1.60	2.95	3.00	2.89	2.78	2.84
12	2.64	2.94	2.57	2.48	1.80	1.17	1.64	2.96	3.02	2.89	2.84	2.80
13	2.63	2.88	2.64	2.46	1.76	1.12	1.78	2.96	3.02	2.88	2.82	2.90
14	2.61	2.73	2.60	2.45	1.74	1.05	1.82	2.87	3.08	2.93	2.86	2.80
15	2.65	2.77	2.69	2.44	1.72	1.02	1.88	2.91	3.08	2.91	2.82	2.75
16	2.67	2.70	2.68	2.40	1.71	1.00	1.92	2.96	3.13	2.87	2.72	2.76
17	2.60	2.81	2.67	2.40	1.68	.96	1.98	2.96	3.10	2.92	2.80	2.70
18	2.67	2.76	2.69	2.36	1.69	.95	2.06	3.02	3.07	2.83	2.77	2.82
19	2.62	2.75	2.69	2.35	1.66	.94	2.12	3.02	3.05	2.86	2.90	2.70
20	2.69	2.80	2.68	2.36	1.66	.94	2.18	3.06	3.02	2.81	2.88	2.78
21	2.75	2.83	2.69	2.32	1.62	1.00	2.28	3.08	3.08	2.92	2.90	2.77
22	2.74	2.80	2.66	2.29	1.63	1.06	2.35	3.10	3.08	2.90	3.00	2.82
23	2.87	2.70	2.64	2.24	1.60	1.08	2.46	3.12	3.00	2.86	2.96	2.78
24	2.79	2.69	2.66	2.24	1.58	1.10	2.62	3.12	2.96	2.84	2.98	2.73
25	2.82	2.73	2.68	2.22	1.56	1.10	2.64	3.12	2.98	2.88	3.04	2.78
26	2.82	2.75	2.68	2.20	1.53	1.10	2.67	3.15	2.95	2.82	3.07	2.73
27	2.81	2.79	2.65	2.17	1.49	1.10	2.71	3.14	2.93	2.84	3.07	2.87
28	2.74	2.78	2.66	2.17	1.50	1.14	2.76	3.11	2.95	2.83	3.14	2.84
29	2.82	2.79	2.62	2.16	1.48	1.20	2.83	3.12	2.93	2.80	3.18	2.78
30	2.87	2.70	2.65	2.10	------	1.26	2.82	3.24	2.92	2.76	3.18	2.83
31	2.61	------	2.70	2.04	------	1.26	------	3.16	------	2.77	3.14	------
MEAN	2.66	2.80	2.65	2.40	1.75	1.19	1.97	3.03	3.05	2.87	2.91	2.88
MAX	2.87	3.02	2.71	2.69	2.05	1.52	2.83	3.24	3.18	3.04	3.18	3.30
MIN	2.51	2.68	2.57	2.04	1.48	.94	1.27	2.87	2.92	2.76	2.72	2.70

WTR YR 1972 MEAN 2.52 MAX 3.30 MIN .94

04084500 Fox River at Rapide Croche Dam, near Wrightstown, Wis.

LOCATION.--Lat 44°19'03", long 88°11'50", in SE 1/4 sec.4, T.21 N., R.19 E., Outagamie County, at Rapide Croche Dam, 2.0 miles upstream from Wrightstown, and 18 miles upstream from mouth.

DRAINAGE AREA.--6,150 sq mi, approximately.

RECORDS AVAILABLE.--March 1896 to September 1917 (monthly discharge only), October 1917 to current year.

GAGE.--Recording headwater and tailwater gages and electric generation are read three times a day and used to compute the discharge records.

AVERAGE DISCHARGE.--76 years, 4,140 cfs.

EXTREMES.--Current year: Maximum daily discharge during year, 13,200 cfs Apr. 25; minimum daily, 1,340 cfs July 6, Aug. 9.
Period of record: Maximum daily discharge, 24,000 cfs Apr. 18, 1952; minimum daily, 138 cfs Aug. 2, 1936.

REMARKS.--Records good. Flow regulated by storage in Lake Winnebago (see p. 57). Daily discharge determined from records of flow through turbines, head, gate openings, and lockages through navigation canal. Usually less than about 5 cfs diverted into basin from Wisconsin River at Portage Canal throughout the year.

COOPERATION.--Figures of daily discharge furnished by Corps of Engineers. Records reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,820	2,250	4,560	4,220	3,580	3,480	6,710	10,300	2,840	2,090	2,000	7,000
2	1,540	3,780	5,000	4,190	3,470	4,450	6,530	10,700	2,800	2,210	2,550	7,860
3	1,780	4,340	4,520	4,140	3,460	4,400	6,390	11,200	2,660	1,860	1,930	6,980
4	1,520	4,450	3,920	4,120	2,870	4,120	6,070	11,100	2,800	1,660	1,810	7,160
5	1,800	4,620	4,220	3,940	3,560	4,280	5,900	11,200	2,730	2,010	2,000	8,200
6	1,640	4,320	4,640	4,070	3,420	4,670	6,170	11,200	2,680	1,340	1,960	7,340
7	1,590	3,780	4,600	4,260	3,340	4,900	6,030	11,100	2,620	2,360	1,580	7,740
8	1,910	4,180	4,590	4,370	3,310	4,620	5,060	11,100	2,640	1,960	2,830	6,610
9	1,800	4,520	4,860	3,980	3,300	4,640	5,530	11,100	2,080	1,890	1,340	6,650
10	1,560	4,070	5,050	4,340	3,340	5,210	6,020	11,200	1,920	1,820	2,340	7,020
11	1,700	3,880	5,210	4,240	3,220	5,600	6,240	11,300	2,480	2,050	2,670	6,920
12	1,620	3,840	3,640	4,220	3,280	5,040	6,400	10,800	2,810	2,060	1,760	6,250
13	1,620	3,790	3,980	4,060	3,310	5,170	6,560	9,550	2,150	2,090	1,950	9,290
14	1,750	3,660	4,260	3,640	3,270	4,940	6,400	9,220	2,890	2,140	1,980	6,690
15	1,740	3,860	4,900	3,970	3,100	5,180	6,560	8,980	2,790	1,810	1,870	6,840
16	1,630	3,770	4,740	4,180	3,140	5,000	6,130	6,500	1,850	1,840	1,930	6,550
17	1,580	3,680	4,320	4,300	3,110	4,840	7,170	4,900	2,420	2,260	2,130	6,480
18	1,740	3,780	3,760	4,160	3,100	4,930	6,960	3,250	2,540	2,000	2,410	6,760
19	1,880	3,880	3,910	3,640	2,820	5,140	6,030	2,570	2,700	1,980	2,360	7,070
20	1,900	4,040	4,400	3,790	3,080	5,150	6,140	2,330	2,230	2,310	2,400	7,200
21	1,620	3,170	4,340	3,260	2,860	5,500	5,940	2,840	2,270	2,120	2,400	7,400
22	1,980	3,780	4,280	3,820	3,000	6,360	7,890	2,660	2,000	2,560	2,430	6,430
23	1,650	5,090	4,400	3,570	3,220	6,260	6,680	2,330	1,770	1,980	2,300	6,700
24	1,860	5,060	4,050	3,370	3,820	6,450	8,250	2,880	1,910	2,130	1,980	6,560
25	2,060	4,480	4,060	3,450	3,880	6,560	13,200	2,780	2,000	1,790	2,920	6,520
26	2,080	4,640	3,490	3,540	3,680	6,530	10,600	2,570	2,060	2,120	2,990	7,220
27	2,500	4,570	4,220	4,170	3,340	6,380	10,200	2,840	2,050	2,240	2,700	6,890
28	2,020	4,640	4,780	3,540	3,630	6,380	10,700	2,720	2,210	1,520	2,720	7,380
29	1,550	4,800	4,320	3,420	3,880	6,310	10,800	2,740	2,140	1,860	2,730	8,940
30	2,000	4,380	4,120	3,300	------	6,260	10,100	2,300	2,260	1,940	3,410	7,380
31	2,660	------	4,370	3,500	------	6,400	------	2,450	------	2,000	5,000	------
TOTAL	56,100	123,100	135,510	120,770	96,390	165,150	219,360	208,710	71,300	62,000	73,380	214,030
MEAN	1,810	4,103	4,371	3,896	3,324	5,327	7,312	6,733	2,377	2,000	2,367	7,134
MAX	2,660	5,090	5,210	4,370	3,880	6,560	13,200	11,300	2,890	2,560	5,000	9,290
MIN	1,520	2,250	3,490	3,260	2,820	3,480	5,060	2,300	1,770	1,340	1,340	6,250

CAL YR 1971 TOTAL 1,457,840 MEAN 3,994 MAX 10,800 MIN 1,280
WTR YR 1972 TOTAL 1,545,800 MEAN 4,223 MAX 13,200 MIN 1,340

04085200 Kewaunee River near Kewaunee, Wis.

LOCATION.--Lat 44°27'30", long 87°33'23", in SW 1/4 sec.14, T.23 N., R.24 E., Kewaunee County, on left bank just downstream from bridge on County Trunk F, 2.3 miles west of Kewaunee, and about 7.0 miles upstream from mouth.

DRAINAGE AREA.--129 sq mi.

PERIOD OF RECORD.--Annual maximum, water years 1958-65, and occasional low-flow measurements, water years 1963-64. September 1964 to current year. No winter records for water years 1965 and 1966.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is about 590 ft (from topographic map). Apr. 3, 1957, to Sept. 2, 1964, crest-stage gage only at same site and datum.

AVERAGE DISCHARGE.--6 years, 70.7 cfs (7.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,500 cfs Mar. 22 (gage height, 15.29 ft, backwater from ice); minimum discharge, 6.9 cfs Nov. 22 (gage height, 7.92 ft), result of freezeup.

Period of record: Maximum discharge, 6,500 cfs Mar. 30, 1960 (gage height, 16.03 ft); minimum recorded, 4.5 cfs Nov. 3, 4, 1966 (gage height, 8.14 ft).

REMARKS.--Records good except those for winter periods, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 1-6, 13, 14, 17-25, Dec. 27 to Apr. 1.)

8.2	12	10.0	302
8.3	18	11.0	683
8.5	36	12.0	1,260
9.0	98	13.0	2,140
9.5	181		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	24	32	46	28	37	220	112	24	15	13	88
2	32	241	29	42	29	35	299	177	24	15	21	142
3	24	234	26	39	28	34	515	160	20	15	26	134
4	22	108	25	34	27	34	427	134	61	14	19	88
5	22	70	26	32	27	34	341	106	32	13	16	67
6	18	52	30	31	26	35	277	92	28	13	17	62
7	18	40	48	34	26	38	211	84	25	15	36	55
8	18	33	62	38	26	37	194	74	24	15	48	48
9	20	32	87	42	26	36	196	65	22	15	73	44
10	20	31	243	45	27	36	320	58	19	16	55	38
11	19	30	1,030	42	28	36	627	55	19	15	43	42
12	18	29	329	38	29	37	557	50	33	17	33	42
13	17	28	130	30	30	37	623	49	39	17	29	46
14	16	27	110	23	30	38	499	50	44	17	24	46
15	16	25	253	20	31	39	484	53	87	25	22	41
16	15	24	723	24	30	40	446	53	61	25	53	36
17	14	26	180	28	30	42	351	47	44	20	189	33
18	14	25	120	29	29	43	271	43	36	18	157	54
19	15	24	110	30	29	46	231	41	32	16	185	66
20	20	24	82	31	30	50	185	40	29	23	116	58
21	31	22	74	30	31	500	152	37	28	43	78	98
22	34	18	68	30	32	2,100	396	35	25	30	74	126
23	42	22	64	29	32	1,900	683	33	23	23	97	91
24	35	19	56	28	32	1,400	386	31	21	18	291	66
25	30	20	64	26	31	1,300	248	29	20	16	196	76
26	26	26	70	26	32	1,500	170	27	20	15	285	209
27	25	42	68	26	34	1,300	137	25	19	16	332	280
28	24	43	64	26	37	1,000	119	24	19	16	213	234
29	24	44	45	26	38	500	104	24	18	15	131	640
30	22	40	33	26	------	300	94	27	16	14	90	484
31	23	------	45	27	------	250	------	26	------	13	66	------
TOTAL	715	1,423	4,326	978	865	12,814	9,763	1,861	912	558	3,028	3,534
MEAN	23.1	47.4	140	31.5	29.8	413	325	60.0	30.4	18.0	97.7	118
MAX	42	241	1,030	46	38	2,100	683	177	87	43	332	640
MIN	14	18	25	20	26	34	94	24	16	13	13	33
CFSM	.18	.37	1.09	.24	.23	3.20	2.52	.47	.24	.14	.76	.91
IN.	.21	.41	1.25	.28	.25	3.70	2.82	.54	.26	.16	.87	1.02

CAL YR 1971 TOTAL 32,678.8 MEAN 89.5 MAX 1,370 MIN 9.4 CFSM .69 IN 9.42
WTR YR 1972 TOTAL 40,777.0 MEAN 111 MAX 2,100 MIN 13 CFSM .86 IN 11.76

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-11	0900	12.16	1,380	4-13	1900	11.04	703
12-16	0730	11.53	962	4-23	0900	11.16	763
3-22	1630	15.29	a2,500	9-29	1630	11.25	810

a About.

04085500 Cedar Lake near Kiel, Wis.

LOCATION.--Lat 43°55'35", long 87°56'25", in SW 1/4 sec.24, T.17 N., R.21 E., Manitowoc County, at Cedar Lake Resort on narrows of Lake, 5.8 miles east of Kiel.

DRAINAGE AREA.--1.33 sq mi.

PERIOD OF RECORD.--August 1936 to September 1942; April 1945 to current year (fragmentary).

GAGE.--Nonrecording gage. Altitude of gage is 890 ft (from topographic map).

EXTREMES.--Current year: Maximum elevation observed, 96.30 ft Sept. 30; minimum observed, 94.61 ft Nov. 27. Period of record: Maximum elevation observed, 98.72 ft Mar. 9, 1946; minimum observed, 93.34 ft Oct. 4, Nov. 1, 1958, Jan. 17, 1959.

An elevation of 100.37 ft was observed May 20, 1929, by Wisconsin Department of Natural Resources.

REMARKS.--Gage heights have been reduced to elevations above datum assumed for this lake by Wisconsin Department of Natural Resources. Lake ice covered about Dec. 4 to Apr. 15.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2	4.67											6.14
3									5.58			
4												
5											5.86	
6		4.70						5.57	5.59			
7	4.67											
8								5.64				
9	4.68											6.09
10		4.65							5.58			
11												
12											5.97	
13		4.64						5.64		5.67		
14			4. 1									
15										5.69		
16	4.62											6.15
17								5.64	5.73			
18												
19											6.17	
20		4.62		5.08				5.61				
21												
22							5.37			5.79		6.22
23	4.63											
24								5.58				
25												
26							5.53				6.20	
27		4.61						5.55				
28												
29					5.06		5.53			5.76		
30	4.64				------	5.25					6.12	6.30
31		------			------		------		------			------

NOTE.--Add 90 ft to obtain elevation above datum assumed for this lake by Wisconsin Department of Natural Resources.

04086000 Sheboygan River at Sheboygan, Wis.

LOCATION.--Lat 43°44'25", long 87°45'35", in SE 1/4 NE 1/4 sec.29, T.15 N., R.23 E., Sheboygan County, on left bank 400 ft upstream from bridge on State Highway 141, near west city limits of Sheboygan, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--432 sq mi.

PERIOD OF RECORD.--June 1916 to September 1924 (published as "near Sheboygan"), October 1950 to current year. Monthly discharge only for some periods, published in WSP 1307, 1727.

GAGE.--Water-stage recorder. Datum of gage is 584.00 ft above mean sea level. June 1916 to June 1924, nonrecording gage at site 0.7 mile downstream at different datum. November 1950 to June 1951, nonrecording gage at site 0.3 mile downstream at datum 3.15 ft lower.

AVERAGE DISCHARGE.--30 years (1916-24, 1950-72), 224 cfs (7.04 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,290 cfs Mar. 21 (gage height, 8.61 ft); minimum, 23 cfs Nov. 22 (gage height, 1.58 ft).

Period of record: Maximum discharge observed, 7,140 cfs Mar. 26, 1920 (gage height, 9.40 ft, datum then in use); minimum observed, about 1 cfs Aug. 27, 1922 (gage height, 1.48 ft, datum then in use), caused by shutdown of powerplants.

REVISIONS (WATER YEARS).--WSP 1307: 1917(M), 1919(M), 1921(M), 1923(M), WSP 1557: Drainage area.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation caused by numerous powerplants above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Dec. 7 to Mar. 29, June 17 to July 24; stage-discharge relation affected by ice Dec. 1-4, 18-25, Dec. 27 to Mar. 16.)

1.6	24	2.5	135	4.0	550
1.8	37	3.0	240	5.0	1,000
2.0	57	3.5	371	6.0	1,620
				8.0	3,170

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	50	66	190	55	56	677	377	113	57	58	143
2	38	111	66	180	68	54	665	481	104	60	82	137
3	46	142	66	150	65	54	647	477	104	62	95	128
4	37	111	68	120	65	54	578	381	101	56	106	113
5	36	86	81	100	62	56	545	290	90	54	91	111
6	41	64	92	100	60	58	546	261	84	54	99	108
7	38	49	91	110	58	58	535	335	76	65	127	103
8	37	59	106	110	56	58	421	308	69	65	176	108
9	34	65	122	110	58	60	440	280	66	81	176	98
10	37	62	232	120	55	84	416	261	64	88	172	88
11	36	58	501	110	58	130	433	226	55	93	193	91
12	34	59	378	110	54	200	436	204	57	84	303	110
13	39	59	200	98	60	400	678	199	69	73	242	160
14	37	56	196	82	60	260	701	195	96	73	191	197
15	40	52	765	76	60	200	634	193	128	67	172	172
16	33	53	1,080	74	60	170	602	193	143	70	185	141
17	29	55	702	80	60	262	575	178	116	67	240	120
18	31	57	450	82	56	610	547	160	103	66	247	338
19	36	59	230	82	56	970	586	146	88	73	242	644
20	43	64	280	82	52	1,550	566	145	79	73	215	500
21	48	60	340	82	54	2,280	500	130	82	84	191	1,040
22	53	40	300	82	54	2,390	1,110	115	75	145	180	995
23	51	49	250	78	52	1,460	1,010	110	66	130	168	783
24	53	58	210	72	52	1,110	810	93	58	98	178	619
25	51	53	190	66	52	1,030	631	88	58	78	178	590
26	48	59	170	62	54	981	534	76	57	76	191	1,010
27	48	72	160	60	55	927	469	70	56	87	226	1,060
28	49	80	160	60	56	1,020	393	66	58	91	231	889
29	45	93	170	60	56	920	359	67	58	85	210	889
30	44	70	180	60	------	746	330	110	58	70	178	828
31	41	------	190	62	------	651	------	127	------	64	158	------
TOTAL	1,276	2,005	8,092	2,910	1,684	18,859	17,374	6,342	2,431	2,389	5,501	12,313
MEAN	41.2	66.8	261	93.9	58.1	608	579	205	81.0	77.1	177	410
MAX	53	142	1,080	190	68	2,390	1,110	481	143	145	303	1,060
MIN	29	40	66	60	52	54	330	66	55	54	58	88
CFSM	.10	.15	.60	.22	.13	1.41	1.34	.47	.19	.18	.41	.95
IN.	.11	.17	.70	.25	.15	1.62	1.50	.55	.21	.21	.47	1.06

CAL YR 1971 TOTAL 90,598 MEAN 248 MAX 2,600 MIN 26 CFSM .57 IN 7.80
WTR YR 1972 TOTAL 81,176 MEAN 222 MAX 2,390 MIN 29 CFSM .51 IN 6.99

PEAK DISCHARGE (BASE, 1,500 CFS).--Mar. 21 (2300) 3,290 cfs (8.61 ft).

04086150 Milwaukee River at Kewaskum, Wis.

LOCATION.--Lat 43°31'02", long 88°13'24", in SE 1/4 SE 1/4 sec.9, T.12 N., R.19 E., Washington County, on right abutment of small dam in Kewaskum, 50 ft above unnamed tributary and 2.6 miles above East Branch Milwaukee River.

DRAINAGE AREA.--146 sq mi.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Nonrecording gage and crest-stage gage. Altitude of gage is 930 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,060 cfs Sept. 21 (gage height, 7.06 ft); minimum observed, 6.2 cfs Oct. 2 (gage height, 1.88 ft).

Period of record: Maximum discharge, 1,060 cfs Sept. 21, 1972 (gage height, 7.06 ft); minimum observed, 1.1 cfs Aug. 25-28, 1970 (gage height, 1.64 ft).

REMARKS.--Records good except those for the winter period and those for period of no gage-height record, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used July 19 to Sept. 30; stage-discharge relation affected by ice Jan. 19 to Mar. 18.)

1.8	4.0	3.0	89
1.9	6.8	4.0	260
2.1	15	5.0	535
2.3	26	6.0	920
2.5	40	7.0	1,350

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	10	14	22	13	15	180	225	40	20	18	78
2	6.2	13	15	20	14	17	160	208	37	21	25	74
3	7.5	22	15	18	14	16	130	182	37	28	30	67
4	10	19	14	16	13	14	110	168	38	27	28	62
5	7.5	17	14	15	13	13	134	162	32	26	28	56
6	8.3	15	15	15	13	13	131	172	34	25	40	60
7	6.8	14	16	16	12	14	89	162	29	28	51	60
8	7.5	14	19	16	12	14	70	165	27	31	49	46
9	6.8	15	21	16	11	14	178	146	19	43	40	40
10	6.8	14	29	16	11	15	131	134	19	59	40	31
11	6.8	13	46	15	12	16	116	108	19	41	52	40
12	6.8	13	40	14	12	17	131	102	31	33	130	44
13	6.8	12	38	13	12	18	159	89	113	37	120	44
14	6.8	12	40	13	12	24	178	77	75	32	120	46
15	6.8	12	64	13	12	33	185	73	64	32	110	44
16	6.8	12	100	15	12	54	189	79	46	32	79	43
17	6.8	12	68	16	12	100	200	73	45	30	68	43
18	7.5	12	46	17	12	160	189	73	40	30	60	376
19	8.3	13	39	17	12	282	192	68	35	29	99	382
20	9.0	13	43	16	12	354	185	56	32	29	94	500
21	9.8	12	42	15	13	720	175	48	53	30	81	1,040
22	9.0	12	41	14	13	535	251	41	46	29	90	932
23	9.8	12	39	14	13	382	220	40	37	28	88	720
24	10	12	36	14	13	314	238	38	31	27	81	720
25	9.8	13	32	13	12	304	238	34	23	27	79	680
26	9.0	13	30	13	12	260	196	31	23	29	110	640
27	9.8	14	25	13	12	240	162	32	20	33	130	563
28	10	15	21	13	12	220	162	32	20	28	120	440
29	9.8	16	20	13	12	200	152	32	20	28	99	382
30	9.0	15	22	13	------	180	152	40	20	28	85	371
31	9.4	------	23	13	------	170	------	44	------	21	81	------
TOTAL	252.0	411	1,027	467	358	4,728	4,983	2,934	1,105	941	2,325	8,624
MEAN	8.13	13.7	33.1	15.1	12.3	153	166	94.6	36.8	30.4	75.0	287
MAX	10	22	100	22	14	720	251	225	113	59	130	1,040
MIN	6.2	10	14	13	11	13	70	31	19	20	18	31
CFSM	.06	.09	.23	.10	.08	1.05	1.14	.65	.25	.21	.51	1.97
IN.	.06	.10	.26	.12	.09	1.20	1.27	.75	.28	.24	.59	2.20

CAL YR 1971 TOTAL 26,846.1 MEAN 73.4 MAX 736 MIN 3.2 CFSM .50 IN 6.84
WTR YR 1972 TOTAL 28,155.0 MEAN 76.9 max 1,040 MIN 6.2 CFSM .53 IN 7.17

NOTE.--No gage-height record Nov. 1 to Jan. 18.

04086200 East Branch Milwaukee River at New Fane, Wis.

LOCATION.--Lat 43°33'01", long 88°11'18", in center of sec.35, T.13 N., R.19 E., Fond du Lac County, on left bank at upstream side of bridge on County Trunk Highway S, 0.4 mile southwest of New Fane, 0.5 mile downstream from recreation dam (formerly a mill dam), and 6.0 miles upstream from mouth.

DRAINAGE AREA.--57.2 sq mi.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 950 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, about 170 cfs Mar. 25; maximum observed gage height, 2.49 ft Mar. 25 (backwater from ice); minimum daily discharge, 4.2 cfs Oct. 2.
Period of record: Maximum discharge, about 190 cfs Apr. 2, 1971; minimum daily, 0.76 cfs Sept. 16, 1971.

REVISION.--WRD Wis. 1971(M).

REMARKS.--Records fair except those for winter period and those for period of no gage-height record, which are poor. Water-stage recorder removed during period of bridge construction. Temporary nonrecording gage established 0.4 mile upstream at different datum and used Jan. 21 to Sept. 30.

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 21 to Mar. 25.)

Oct. 1-31				Jan. 21 to Sept. 30			
0.70	0.7	1.1	2.3	0.4	5	1.0	20
.80	.9	1.2	2.9	.5	7	1.5	49
.90	1.2	1.4	6.3	.7	12	2.0	99
1.0	1.7	1.6	14			2.5	177

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	10	10	15	7.8	6.2	59	47	17	14	16	22
2	4.2	12	11	14	7.8	6.8	58	56	16	19	18	22
3	5.3	13	11	12	7.6	7.2	56	56	19	19	17	19
4	5.3	13	11	11	7.6	7.5	47	56	17	18	16	18
5	5.3	11	11	9.8	7.4	7.8	46	56	16	17	15	17
6	6.1	10	12	9.6	7.2	8.0	46	56	16	16	22	16
7	6.1	10	13	10	7.0	8.2	46	50	15	20	27	16
8	5.5	10	14	11	7.0	8.2	42	45	14	18	27	15
9	5.5	10	16	11	7.0	8.0	39	42	14	27	30	15
10	5.5	10	21	10	7.2	7.4	35	37	13	26	28	15
11	5.3	9.8	30	9.6	7.2	9.2	38	34	13	23	30	14
12	4.7	9.6	29	8.8	7.4	10	37	30	15	21	30	25
13	4.7	9.4	27	8.2	7.4	10	54	29	18	19	30	24
14	4.5	9.0	27	7.4	7.4	11	58	29	24	17	33	23
15	4.5	8.8	32	7.4	7.4	11	59	28	26	16	33	25
16	4.5	9.0	50	8.0	7.4	12	57	28	25	16	34	24
17	4.3	9.2	34	8.2	7.4	12	55	26	23	18	25	28
18	5.9	9.3	31	8.4	7.4	12	55	24	20	20	24	40
19	7.0	9.6	29	8.4	7.2	13	59	23	19	17	25	77
20	7.0	9.8	24	8.4	7.0	15	56	23	18	17	24	108
21	7.3	9.4	30	8.4	6.6	16	57	21	17	20	23	130
22	7.7	8.6	30	8.0	6.4	63	64	19	17	19	22	123
23	7.7	8.8	27	7.8	6.2	100	61	18	16	18	28	113
24	8.3	9.2	25	7.6	6.0	140	61	17	16	17	30	102
25	8.3	9.2	23	7.4	5.8	170	62	16	15	16	22	104
26	8.3	9.4	20	7.4	5.6	150	59	15	14	16	23	92
27	8.0	10	18	7.2	5.4	100	56	14	14	18	24	91
28	7.7	11	16	7.2	5.4	79	47	13	14	17	25	86
29	9.0	12	15	7.4	5.4	70	47	15	14	16	24	79
30	9.7	12	16	7.5	------	62	46	23	14	16	24	74
31	9.0	------	16	7.8	------	60	------	22	------	14	23	------
TOTAL	196.7	302.3	684	279.9	199.6	1,200.5	1,562	968	509	565	772	1,557
MEAN	6.35	10.1	22.1	9.03	6.88	38.7	52.1	31.2	17.0	18.2	24.9	51.9
MAX	9.7	13	50	15	7.8	170	64	56	26	27	34	130
MIN	4.2	8.6	10	7.2	5.4	6.2	35	13	13	14	15	14
CFSM	.11	.18	.39	.16	.12	.68	.91	.55	.30	.32	.44	.91
IN.	.13	.20	.44	.18	.13	.78	1.02	.63	.33	.37	.50	1.01

CAL YR 1971 TOTAL 9,845.16 MEAN 27.0 MAX 180 MIN .76 CFSM .47 IN 6.40
WTR YR 1972 TOTAL 8,796.00 MEAN 24.0 MAX 170 MIN 4.2 CFSM .42 IN 5.72

NOTE.--No gage-height record Nov. 1 to Jan. 20.

04086340 North Branch Milwaukee River near Fillmore, Wis.

LOCATION.--Lat 43°28'58", long 88°03'39", in NW 1/4 sec.25, T.12 N., R.20 E., Washington County, on right bank downstream from County Trunk Highway M, 1.1 miles south of Fillmore and 2.0 miles upstream from mouth.

DRAINAGE AREA.--153 sq mi.

RECORDS AVAILABLE.--April 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 955 cfs Mar. 22 (gage height, 5.69 ft); minimum daily, 18 cfs Oct. 14-17.

Period of record: Maximum discharge, 955 cfs Mar. 22, 1972 (gage height, 5.69 ft); minimum, 3.0 cfs Aug. 17, 18, 1970 (gage height, 0.19 ft).

REVISIONS.--The maximum discharge for the water year 1971 has been revised to 784 cfs Apr. 13, 1971 (gage height, 5.57 ft), superseding figure published in WRD Wisconsin 1971.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are fair.

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 19 to Mar. 21.)

Oct. 1 to Mar. 19

0.70	18	2.0	83
1.0	30	3.0	159
1.5	54	4.0	276

Mar. 20 to Sept. 30

0.80	21	4.0	276
1.0	30	5.0	470
2.0	83	5.4	620
3.0	159	5.7	970

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	35	39	56	22	26	181	128	62	21	24	40
2	20	52	42	54	23	26	174	158	55	32	36	38
3	19	58	41	50	23	26	160	180	53	36	48	36
4	24	54	40	47	22	26	144	184	62	30	39	33
5	24	48	39	42	22	26	141	173	54	27	32	32
6	22	42	39	36	22	27	140	157	47	24	34	30
7	22	36	43	33	22	29	139	147	40	29	93	29
8	21	38	49	31	22	33	133	135	35	40	102	28
9	20	40	56	33	22	38	130	121	31	56	97	28
10	19	37	70	35	22	46	129	107	29	72	93	27
11	19	34	170	33	23	70	130	95	27	59	107	28
12	19	32	140	31	23	110	139	84	31	46	138	32
13	20	31	100	29	24	140	165	76	63	42	142	86
14	18	30	90	28	25	120	174	72	77	37	126	116
15	18	29	200	26	26	110	180	69	88	42	108	96
16	18	29	330	25	26	120	181	67	78	41	88	82
17	18	30	270	24	25	120	172	62	66	31	69	66
18	19	30	140	23	25	140	157	57	55	40	55	165
19	21	31	96	23	25	170	146	51	45	40	57	246
20	23	32	110	23	24	320	141	45	39	36	53	314
21	24	31	130	22	24	620	139	41	36	48	45	575
22	25	30	120	22	24	910	197	38	33	61	40	652
23	26	29	100	22	25	676	230	35	29	51	38	468
24	27	30	98	22	25	590	232	32	26	41	75	396
25	26	31	86	21	25	470	212	29	26	33	81	333
26	26	30	78	21	26	391	188	27	26	30	90	297
27	27	35	80	21	26	276	165	25	24	40	101	294
28	28	40	62	21	26	244	143	24	23	40	86	260
29	26	44	48	21	26	215	126	27	23	34	69	241
30	27	42	54	21	------	182	113	55	23	30	57	222
31	27	------	58	22	------	176	------	67	------	26	47	------
TOTAL	696	1,090	3,018	918	695	6,473	4,801	2,568	1,306	1,215	2,270	5,290
MEAN	22.5	36.3	97.4	29.6	24.0	209	160	82.8	43.5	39.2	73.2	176
MAX	28	58	330	56	26	910	232	184	88	72	142	652
MIN	18	29	39	21	22	26	113	24	23	21	24	27
CFSM	.15	.24	.64	.19	.16	1.37	1.05	.54	.28	.26	.48	1.15
IN.	.17	.27	.73	.22	.17	1.57	1.17	.62	.32	.30	.55	1.29

CAL YR 1971 TOTAL 30,529 MEAN 83.6 MAX 623 MIN 11 CFSM .55 IN 7.42
WTR YR 1972 TOTAL 30,340 MEAN 82.9 MAX 910 MIN 18 CFSM .54 IN 7.38

NOTE.--No gage-height record Oct. 7 to Jan. 19.

04086360 Milwaukee River at Waubeka, Wis.

LOCATION.--Lat 43°28'22", long 87°59'23", in SE 1/4 sec.28, T.12 N., R.21 E., Ozaukee County, on right bank 100 ft downstream from bridge on County Trunk Highway I, 800 ft downstream from recreation pond dam at Waubeka, and 2.4 miles downstream from North Branch Milwaukee River.

DRAINAGE AREA.--428 sq mi.

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 770 ft (from topographic map). Prior to Aug. 1, 1968, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 2,100 cfs Mar. 22 (gage height, 8.14 ft, backwater from ice); minimum, 41 cfs Nov. 22 (gage height, 2.15 ft).

Period of record: Maximum discharge, 2,500 cfs Apr. 13, 1971 (gage height, 7.35 ft); minimum, 19 cfs Aug. 18, 1970 (gage height, 1.90 ft).

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 19 to Mar. 28.)

2.2	49	4.0	489
2.5	93	5.0	894
3.0	191	6.0	1,380
3.5	315	7.0	2,150

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	89	102	150	72	96	519	406	168	70	82	176
2	60	149	118	140	72	100	493	493	151	90	100	168
3	57	162	118	120	72	100	452	533	151	100	127	162
4	63	155	107	110	72	100	395	496	155	90	114	149
5	64	143	107	100	70	100	412	478	137	82	105	139
6	60	127	112	96	68	98	409	467	125	78	114	131
7	60	107	129	100	68	100	423	445	112	90	234	120
8	59	118	143	110	68	110	361	416	98	110	248	114
9	56	120	166	110	70	130	371	364	90	140	250	107
10	56	110	243	100	72	150	371	312	82	170	234	100
11	55	105	354	96	74	230	357	306	78	150	315	96
12	53	103	328	92	76	330	388	273	86	140	398	105
13	55	100	281	88	78	450	410	253	193	130	367	255
14	53	96	286	84	78	400	460	238	231	129	328	321
15	52	92	526	80	78	380	490	236	260	318	292	298
16	53	93	800	78	78	370	510	225	243	168	278	258
17	53	95	450	76	78	420	500	211	218	125	229	195
18	55	96	320	76	78	600	470	200	255	145	200	597
19	57	100	290	74	80	900	450	187	213	143	193	548
20	66	102	320	72	82	1,300	430	166	187	129	202	930
21	74	100	330	72	84	1,500	620	157	133	145	200	1,510
22	75	90	320	70	86	1,900	780	143	121	162	183	1,640
23	76	95	300	68	86	1,800	740	133	105	147	170	1,600
24	78	100	280	68	88	1,600	660	123	93	127	278	1,350
25	78	96	250	68	88	1,400	567	116	87	110	263	1,290
26	78	98	230	66	86	1,300	537	103	84	102	309	1,270
27	81	110	190	66	86	1,200	478	93	80	123	321	1,270
28	83	114	160	68	86	960	423	86	75	121	303	1,100
29	83	125	150	68	90	782	395	96	70	110	265	1,040
30	83	120	160	68	------	601	361	155	68	98	227	849
31	84	------	170	70	------	519	------	164	------	87	200	------
TOTAL	2,024	3,310	7,840	2,704	2,264	20,026	14,232	8,074	4,149	3,929	7,129	17,888
MEAN	65.3	110	253	87.2	78.1	646	474	260	138	127	230	596
MAX	84	162	800	150	90	1,900	780	533	260	318	398	1,640
MIN	52	89	102	66	68	96	357	86	68	70	82	96
CFSM	.15	.26	.59	.20	.18	1.51	1.11	.61	.32	.30	.54	1.39
IN.	.18	.29	.68	.24	.20	1.74	1.24	.70	.36	.34	.62	1.55

CAL YR 1971 TOTAL 96,372 MEAN 264 MAX 2,250 MIN 26 CFSM .62 IN 8.38
WTR YR 1972 TOTAL 93,569 MEAN 256 MAX 1,900 MIN 52 CFSM .60 IN 8.13

NOTE.--No gage-height record Dec. 16 - Jan. 18.

04087000 Milwaukee River at Milwaukee, Wis.

LOCATION.--Lat 43°06'00", long 87°54'32", in NE 1/4 sec.5, T.7 N., R.22 E., Milwaukee County, on left bank near northeast limits of Milwaukee in Estabrook Park, 2,000 ft downstream from Port Washington Road Bridge and 6.6 miles upstream from mouth.

DRAINAGE AREA.--686 sq mi.

PERIOD OF RECORD.--April 1914 to current year. Published as "near Milwaukee" prior to 1936.

GAGE.--Water-stage recorder. Datum of gage is 607.23 ft above mean sea level (levels by Corps of Engineers). Prior to Apr. 6, 1929, nonrecording gage near present site at different datum. Apr. 6, 1929, to Jan. 8, 1934, nonrecording gage at bridge half a mile upstream at different datum.

AVERAGE DISCHARGE.--58 years, 382 cfs (7.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,090 cfs Sept. 18 (gage height, 6.24 ft); minimum, 6.6 cfs May 15 (gage height, 1.65 ft), result of regulation.

Period of record: Maximum discharge, 15,100 cfs Mar. 20, 1918, Aug. 6, 1924 (gage height, 9.00 ft, datum then in use, from floodmark for 1918, from graph based on gage reading for 1924), no flow Sept. 8, 1943.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation caused by recreation dam approximately 600 ft upstream.

REVISIONS (WATER YEARS).--WSP 564: 1918(M). WSP 924: 1940. WSP 1207: 1936(M). WSP 1337: 1915-17(M), 1918, 1919-21(M), 1922, 1923(M), 1924, 1925-33(M). WSP 1557: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used June 3 to Sept. 30; stage-discharge relation affected by ice Dec. 2-6, Jan. 4 to Feb. 22, Feb. 26 to Mar. 5.)

1.9	55	3.0	700
2.0	84	4.0	1,750
2.2	165	5.0	3,180
2.5	325	6.0	4,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	301	143	275	120	140	881	800	250	147	138	364
2	105	497	140	260	120	130	819	1,070	269	152	207	308
3	216	247	140	260	120	120	761	1,120	370	156	152	270
4	111	252	150	240	120	110	704	1,060	325	175	153	258
5	108	216	160	220	120	110	631	905	332	180	149	255
6	101	190	170	200	110	124	666	856	295	185	169	248
7	86	165	180	180	110	175	727	876	255	215	305	245
8	85	150	199	180	100	250	658	790	225	225	293	230
9	86	160	233	190	100	227	583	745	210	225	376	205
10	79	161	512	210	100	219	575	640	190	230	358	185
11	80	154	840	190	110	212	583	559	165	264	536	220
12	84	144	767	180	110	339	583	532	250	284	618	185
13	83	139	604	170	120	477	666	498	384	334	667	895
14	82	128	446	160	120	437	754	460	772	437	916	763
15	83	125	1,900	150	120	395	828	180	945	890	663	772
16	82	120	2,020	150	120	427	915	142	683	556	576	658
17	77	120	1,430	150	110	488	885	338	551	293	537	528
18	343	130	501	150	110	807	838	351	425	278	430	1,880
19	414	130	451	140	110	1,160	781	325	390	253	439	1,560
20	248	140	636	140	110	1,460	700	301	425	261	339	1,560
21	134	130	747	140	120	2,010	718	271	358	240	351	3,230
22	113	120	524	130	120	2,730	1,320	260	271	219	360	2,960
23	119	114	486	130	112	2,620	1,410	245	225	243	367	2,700
24	151	129	482	120	114	2,330	1,280	230	195	246	493	2,380
25	135	138	384	120	115	2,110	1,080	220	170	213	640	2,000
26	118	151	398	110	110	1,740	905	210	156	195	1,100	2,180
27	118	203	392	110	100	1,510	828	200	152	214	730	1,950
28	108	168	258	110	120	1,280	718	175	152	184	737	1,850
29	110	275	225	110	120	1,060	615	156	156	180	629	2,160
30	130	218	304	110	------	911	567	185	152	163	510	1,750
31	111	------	240	110	------	795	------	220	------	147	415	------
TOTAL	4,022	5,315	16,062	5,095	3,291	26,903	23,979	14,920	9,698	7,984	14,353	34,749
MEAN	130	177	518	164	113	868	799	481	323	258	463	1,158
MAX	414	497	2,020	275	120	2,730	1,410	1,120	945	890	1,100	3,230
MIN	77	114	140	110	100	110	567	142	152	147	138	185
CFSM	.19	.26	.76	.24	.16	1.27	1.16	.70	.47	.38	.67	1.69
IN.	.22	.29	.87	.28	.18	1.46	1.30	.81	.53	.43	.78	1.88

CAL YR 1971 TOTAL 169,272 MEAN 464 MAX 3,810 MIN 64 CFSM .68 IN 9.18
WTR YR 1972 TOTAL 166,371 MEAN 455 MAX 3,230 MIN 77 CFSM .66 IN 9.02

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-18	0900	5.15	a3,320	7-14	2300	4.45	2,120
10-19	2000	4.41	a2,190	8-14	1600	4.63	2,290
12-15	0800	4.76	2,800	8-25	2300	4.46	2,110
3-22	1800	4.81	2,880	9-18	0300	6.24	5,090
				9-20	2300	5.39	3,580

a Regulated.

04087120 Menomonee River at Wauwatosa, Wis.

LOCATION.--Lat 43°02'44", long 87°59'59", in NW 1/4 sec.27, T.7 N., R.21 E., Milwaukee County, near left bank on downstream side of 70th Street bridge in Wauwatosa, 800 ft downstream from Honey Creek, and 6.2 miles upstream from mouth.

DRAINAGE AREA.--123 sq mi.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 630.86 ft above mean sea level.

AVERAGE DISCHARGE.--11 years, 74.2 cfs (8.19 inches per year).

EXTREMES.--Current year: Maximum observed discharge, 6,610 cfs Sept. 18 (gage height, 10.39 ft); minimum daily, 13 cfs Oct. 11.
Period of record: Maximum discharge, 6,610 cfs Sept. 18, 1972 (gage height, 10.39 ft); minimum daily, 2.8 cfs Jan. 18, 1964.

REMARKS.--Records fair except those for winter periods, which are poor.

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 3-7, Jan. 13 to Feb. 18.)

Oct. 1 to Dec. 14				Dec. 15 to Sept. 17				Sept. 18-30	
0.90	11	2.0	188	0.90	13	1.7	150	2.0	287
1.0	16	2.5	365	1.0	19	2.0	240	2.5	481
1.1	22	3.0	582	1.1	28	2.5	415	3.0	700
1.2	31	4.0	1,060	1.2	41	3.0	615	4.0	1,190
1.4	56	5.0	1,710	1.4	78	4.0	1,090	5.0	1,770
1.7	113					5.0	1,710	7.0	3,210

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	21	49	64	25	156	124	565	36	25	93	72
2	14	194	26	58	25	51	134	318	33	44	134	76
3	211	46	18	50	24	41	127	199	89	15	38	55
4	24	34	29	45	24	34	117	153	72	15	31	46
5	18	24	34	45	24	36	102	117	38	16	25	46
6	17	22	46	46	24	34	117	158	34	14	36	44
7	15	19	56	48	24	573	129	211	32	37	114	41
8	15	22	60	51	24	153	100	181	31	25	72	46
9	14	26	79	129	25	124	91	122	27	17	44	40
10	14	22	446	78	26	62	91	97	24	21	36	33
11	13	22	246	74	28	129	98	78	23	19	33	80
12	31	24	127	70	30	227	93	72	158	18	164	46
13	19	30	122	50	31	172	140	89	145	46	89	426
14	17	22	1,350	32	32	140	129	134	119	28	72	214
15	17	17	742	24	33	100	164	91	107	237	224	178
16	15	19	516	24	35	150	360	62	53	184	170	147
17	17	18	202	25	37	706	145	50	38	290	122	321
18	17	83	175	26	35	449	124	46	32	127	98	2,520
19	19	30	158	27	33	404	112	41	93	78	167	839
20	70	23	117	27	38	793	96	40	44	66	100	610
21	37	20	100	28	44	1,160	297	32	32	58	80	1,960
22	27	17	82	29	28	544	558	28	27	41	89	839
23	20	20	74	28	24	364	293	27	25	60	64	619
24	41	21	76	27	32	234	178	26	24	34	442	510
25	25	19	72	26	31	164	145	26	22	27	346	380
26	26	19	72	25	28	127	119	24	23	161	569	346
27	25	61	89	24	25	102	105	25	23	78	300	388
28	19	29	60	24	300	102	87	24	24	33	202	338
29	17	158	85	24	202	110	82	56	28	27	140	650
30	29	52	127	24	------	129	72	43	24	24	105	396
31	28	------	93	24	------	127	------	36	------	24	76	------
TOTAL	880	1,139	6,028	1,276	1,291	7,697	4,629	3,171	1,480	1,889	4,275	12,306
MEAN	28.4	38.0	194	41.2	44.5	248	154	102	49.3	60.9	138	410
MAX	211	194	1,350	129	300	1,160	658	565	158	290	569	2,520
MIN	13	17	18	24	24	34	72	24	22	14	25	33
CFSM	.23	.31	1.58	.34	.36	2.02	1.25	.83	.40	.50	1.12	3.33
IN.	.27	.34	1.82	.39	.39	2.33	1.40	.96	.45	.57	1.29	3.72

CAL YR 1971 TOTAL 35,882 MEAN 98.3 MAX 1,550 MIN 10 CFSM .80 IN 10.85
WTR YR 1972 TOTAL 46,061 MEAN 126 MAX 2,520 MIN 13 CFSM 1.02 IN 13.93

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	-	5.09	1,770	6-12	-	3.80	982
12-10	-	4.01	1,060	7-17	-	4.58	1,430
12-14	1325	4.45	1,320	a9-18	-	10.39	6,610
3-17	1640	3.21	706	a9-21	-	6.38	2,720
3-21	1650	4.13	1,160				

a About.

04087204 Oak Creek at South Milwaukee, Wis.

LOCATION.--Lat 42°55'30", long 87°52'12", in NW 1/4 sec.2, T.5 N., R.22 E., Milwaukee County, on left bank 25 ft downstream from 15th Avenue bridge in South Milwaukee and 2.8 miles upstream from mouth.

DRAINAGE AREA.--25.0 sq mi.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and crest-stage indicator. Altitude of gage is 630 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 18.6 cfs (10.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 916 cfs Sept. 18 (gage height, 8.23 ft); minimum, 0.60 cfs Oct. 18 (gage height, 2.30 ft).

Period of record: Maximum discharge, 916 cfs Sept. 18, 1972 (gage height, 8.23 ft); minimum, 0.40 cfs Jan. 3, 1964 (gage height, 2.33 ft).

REMARKS.--Records fair except those for winter periods, periods of no gage-height record, and periods of backwater from vegetation, which are poor. Low flows may occasionally be affected by activity of gravel pit upstream.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Sept. 13, 14, 17-22, 29; stage-discharge relation affected by ice Jan. 4 to Feb. 15, Feb. 17-22, 24, 26.)

2.3	0.6	3.5	67
2.4	1.6	4.0	105
2.5	4.2	5.0	207
2.7	14	6.0	358
3.0	32	7.0	550
		8.0	836

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.7	7.4	18	1.4	75	24	27	2.8	3.6	3.0	3.7
2	1.1	17	3.7	15	1.5	42	21	24	2.8	58	63	3.4
3	2.4	12	2.6	10	1.6	19	17	18	5.0	27	37	2.9
4	5.6	3.4	2.4	7.2	1.5	9.3	16	14	4.1	13	13	2.4
5	3.0	1.9	2.5	5.0	1.4	6.8	14	11	3.0	8.6	8.7	2.1
6	1.6	1.3	6.0	4.0	1.3	7.9	18	17	2.8	5.9	12	1.9
7	1.1	1.3	7.2	3.0	1.2	73	27	53	2.4	8.2	12	3.9
8	1.4	1.3	6.2	3.5	1.2	57	14	62	2.4	6.8	10	4.6
9	1.2	1.3	7.3	4.5	1.2	28	13	87	1.9	5.0	7.2	3.2
10	1.1	1.4	20	6.0	1.3	12	12	34	1.6	4.0	5.4	2.1
11	1.0	1.5	60	5.4	1.4	36	12	21	1.4	4.5	37	6.6
12	1.0	1.6	25	6.0	1.5	98	13	16	34	3.9	40	7.8
13	1.0	1.3	13	4.0	1.5	71	16	14	21	5.7	16	326
14	1.2	1.2	7.0	2.0	1.6	15	16	15	18	14	12	200
15	1.1	1.1	66	1.0	2.1	16	18	16	53	35	9.9	64
16	1.2	1.2	100	1.2	2.1	23	193	17	15	16	7.8	41
17	1.2	1.2	30	1.6	2.3	170	221	13	7.1	38	6.6	166
18	.80	1.5	22	2.0	2.4	252	85	11	4.5	119	5.0	710
19	2.4	1.4	17	1.8	2.4	125	48	9.1	23	39	7.8	509
20	9.9	1.6	10	1.6	2.4	119	33	7.8	104	20	6.2	246
21	8.8	1.5	8.0	1.4	2.4	157	38	6.8	32	12	4.6	312
22	3.4	1.6	10	1.8	2.3	102	250	6.1	14	8.2	3.9	152
23	2.4	1.3	6.4	2.2	2.3	32	91	5.5	9.3	6.1	7.8	78
24	3.2	1.3	6.0	2.0	2.1	22	45	5.3	6.8	5.0	8.8	53
25	2.6	1.2	5.8	1.7	1.6	17	29	4.7	5.7	4.6	14	41
26	2.9	3.7	3.8	1.5	1.7	14	21	4.4	5.2	5.9	83	32
27	1.9	7.6	5.2	1.3	1.5	12	16	3.7	4.6	7.2	36	25
28	1.4	7.8	7.0	1.3	21	12	14	3.2	4.5	5.5	14	52
29	1.2	16	10	1.3	38	13	13	3.7	6.1	3.7	8.8	199
30	1.3	18	14	1.3	------	13	11	4.3	4.1	3.0	6.2	54
31	1.2	------	31	1.4	------	15	------	3.6	------	2.7	4.6	------
TOTAL	71.00	118.2	522.0	114.0	106.7	1,666.0	1,360	538.2	402.1	499.1	511.3	3,304.6
MEAN	2.29	3.94	16.8	3.68	3.68	53.7	45.3	17.4	13.4	16.1	16.5	110
MAX	9.9	18	100	18	38	252	250	87	104	119	83	710
MIN	.80	1.1	2.4	1.0	1.2	6.8	11	3.2	1.4	2.7	3.0	1.9
CFSM	.09	.16	.67	.15	.15	2.15	1.81	.70	.54	.64	.66	4.40
IN.	.11	.18	.78	.17	.16	2.48	2.02	.80	.60	.74	.76	4.92

CAL YR 1971 TOTAL 6,854.80 MEAN 18.8 MAX 450 MIN .80 CFSM .75 IN 10.20
WTR YR 1972 TOTAL 9,216.20 MEAN 25.2 MAX 710 MIN .80 CFSM 1.01 IN 13.71

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-16	-	5.54	281	9-13	1045	7.00	495
3-17	1915	6.03	363	9-18	0245	8.23	916
4-16	2000	6.26	405	9-21	1145	6.44	374
4-22	0715	5.88	338	9-29	0745	5.88	288

NOTE.--No gage-height record Oct. 1-14, Nov. 8-15, Dec. 4-30.

04087220 Root River near Franklin, Wis.

LOCATION.--Lat 42°52'25", long 87°59'45", in SE 1/4 sec.22, T.5 N., R.21 E., Milwaukee County, on right bank 400 ft upstream from State Highway 100, 2.1 miles upstream from Root River Canal, 2.4 miles southeast of Franklin, 5.5 miles southeast of Hales Corners, and about 24 miles upstream from mouth.

DRAINAGE AREA.--49.3 sq mi.

RECORDS AVAILABLE.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 674.5 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 38.7 cfs (10.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,270 cfs Sept. 18 (gage height, 8.80 ft); minimum discharge, 1.2 cfs Oct. 2, 3 (gage height, 1.65 ft).

Period of record: Maximum discharge, 2,650 cfs June 30, 1969 (gage height, 8.36 ft); maximum gage height, 8.80 ft Sept. 18, 1972, backwater from vegetation; minimum discharge, 0.38 cfs Aug. 10, 1971 (gage height, 1.45 ft).

Flood of Mar. 30, 1960, reached a stage of 9.57 ft (discharge, 5,130 cfs, from rating curve extended above 2,000 cfs on basis of contracted-opening measurement of peak-flow).

REMARKS.--Records good except those for winter periods, which are poor.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 20, Nov. 2, 3, Dec. 30, Mar. 17-25, Apr. 16 to May 10, Aug. 26, Sept. 13, 14, 18-22, 29; stage-discharge relation affected by ice Dec. 21, 22, 24, 25, Dec. 31 to Mar. 16.)

1.6	1.0	2.4	38	6.0	350
1.7	1.8	3.0	84	6.5	498
1.9	7.2	5.0	212	7.0	760
2.1	18	5.5	267	7.5	1,300
				8.0	2,040

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.2	26	25	3.7	80	52	65	11	6.0	4.2	15
2	1.6	91	22	12	4.2	94	59	72	8.0	68	60	15
3	3.4	22	15	7.0	4.8	44	42	62	19	34	58	13
4	21	13	6.3	4.5	4.3	38	42	45	18	22	17	11
5	4.9	8.7	5.9	3.9	3.5	34	38	36	11	13	11	9.8
6	2.0	53	19	3.5	3.0	32	41	42	8.1	8.8	11	9.9
7	1.6	4.1	23	4.5	2.7	50	66	70	6.5	10	79	8.9
8	2.3	3.7	27	6.8	2.5	150	35	136	5.6	13	37	18
9	1.9	3.9	24	4.0	2.5	120	31	159	5.4	8.7	19	13
10	1.6	4.9	123	15	2.5	54	30	73	4.9	7.3	13	11
11	1.6	4.8	233	11	2.7	70	34	47	5.1	6.9	47	14
12	1.4	5.2	55	6.0	2.8	180	31	39	28	5.7	101	21
13	1.4	3.5	31	5.6	3.0	190	38	35	98	14	28	306
14	2.0	3.4	21	4.0	3.2	150	36	38	25	19	27	364
15	1.6	3.6	286	3.1	3.3	130	43	41	125	76	42	107
16	1.4	3.6	408	2.5	3.4	120	190	42	48	25	28	49
17	1.3	4.1	83	2.9	3.5	416	340	34	22	18	20	116
18	1.4	4.5	65	3.4	3.6	1,340	119	29	17	77	16	1,380
19	2.2	3.7	50	4.5	3.8	888	68	26	14	28	15	1,130
20	40	5.7	25	6.0	3.9	356	50	25	55	19	15	359
21	13	3.4	23	5.6	3.9	615	54	23	29	13	12	630
22	4.5	2.8	19	6.8	4.0	384	541	21	17	10	10	590
23	3.1	3.2	17	8.0	4.0	105	222	20	13	8.1	10	205
24	3.4	2.8	16	6.0	3.8	55	98	18	10	7.8	81	135
25	6.9	2.9	10	4.5	3.8	46	58	16	9.7	7.1	36	95
26	5.7	3.2	16	3.9	4.0	39	46	14	8.9	6.5	235	89
27	2.9	14	16	3.3	6.4	32	39	14	8.3	16	191	73
28	2.4	15	20	3.1	10	33	34	10	8.2	11	52	77
29	1.8	15	28	3.0	60	30	33	10	8.0	7.2	30	350
30	1.9	32	63	3.1	------	29	32	14	6.8	5.6	23	199
31	2.8	------	52	3.3	------	35	------	13	------	4.8	18	------
TOTAL	145.7	343.9	1,821.2	192.6	167.0	5,939	2,542	1,289	653.5	576.5	1,346.2	6,413.6
MEAN	4.70	11.5	58.7	6.22	5.76	192	84.7	41.6	21.8	18.6	43.4	214
MAX	40	91	408	25	60	1,340	541	159	125	77	235	1,380
MIN	1.3	2.8	6.3	2.5	2.5	29	30	10	4.9	4.8	4.2	8.9
CFSM	.10	.23	1.19	.13	.12	3.89	1.72	.84	.44	.38	.88	4.34
IN.	.11	.26	1.37	.15	.13	4.48	1.92	.97	.49	.44	1.02	4.84

CAL YR 1971 TOTAL 14,407.98 MEAN 39.5 MAX 866 MIN .44 CFSM .80 IN 10.87
WTR YR 1972 TOTAL 21,430.40 MEAN 58.6 MAX 1,380 MIN 1.3 CFSM 1.19 IN 16.17

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-16	0200	6.85	660	9-14	0300	6.94	550
3-18	1000	7.54	1,640	9-18	2000	8.80	2,270
3-21	0600	7.03	920	9-21	2000	7.55	870
4-17	0300	6.42	546	9-29	1600	6.60	423
4-22	1500	6.85	800				

04087233 Root River Canal near Franklin, Wis.

LOCATION.--Lat 42°48'55", long 87°59'40", in SE 1/4 sec.10, T.4 N., R.21 E., Racine County, on right bank 10 ft downstream from highway bridge 3.5 miles upstream from mouth, 5.5 miles southeast of intersection U.S. 45 and State 100 in Franklin, and 8.7 miles southeast of Hales Corners.

DRAINAGE AREA.--57.2 sq mi.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 670 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 38.5 cfs (9.14 inches per year).

EXTREMES.--Current year: Maximum discharge, 704 cfs Sept. 18 (gage height, 9.66 ft); minimum, 0.60 cfs Nov. 23 (gage height, 2.19 ft).

Period of record: Maximum discharge, 774 cfs Feb. 11, 1966 (gage height, 9.27 ft); minimum daily, 0.40 cfs Dec. 19, 1963, result of freezeup.

REMARKS.--Records fair except those below 3.0 cfs, which are poor.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 9 to Dec. 30, May 31 to June 15, Aug. 2-27, Sept. 12-25; stage-discharge relation affected by ice Dec. 24-28, Jan. 3, 4, 6-8, Jan. 27 to Mar. 5, Mar. 7-15.)

2.0	0.50	3.5	32	7.0	223
2.2	2.8	4.0	47	8.0	340
2.5	7.8	5.0	87	9.0	580
3.0	19	6.0	143	10.0	1,060

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.4	3.6	41	3.6	28	37	57	11	14	10	34
2	1.5	2.0	2.0	34	3.9	25	42	57	9.4	18	128	40
3	2.0	9.0	1.3	25	4.0	22	45	51	11	17	224	32
4	4.6	6.0	1.0	21	4.0	19	49	45	12	15	122	26
5	3.4	4.2	1.3	20	3.8	17	48	40	9.0	13	72	22
6	2.3	3.1	2.2	18	3.5	15	52	44	8.8	11	56	20
7	1.8	2.7	2.7	14	3.3	13	63	53	7.8	13	148	19
8	1.6	2.2	3.1	11	3.1	50	45	100	7.1	13	108	22
9	1.5	2.1	3.6	16	2.9	42	39	137	7.3	11	70	19
10	1.6	2.0	27	15	2.9	36	38	98	7.4	9.8	51	16
11	1.6	2.1	55	13	2.9	34	39	72	7.3	8.4	74	42
12	1.1	2.1	27	12	2.9	37	40	58	13	7.6	132	103
13	1.2	2.0	17	11	2.9	43	56	52	18	12	85	351
14	1.8	1.8	11	9.6	2.8	54	55	49	18	17	97	511
15	1.9	1.6	83	5.7	2.8	72	57	48	177	177	291	391
16	1.8	1.6	113	4.6	2.8	96	296	46	135	209	209	205
17	1.5	1.7	59	4.6	2.8	272	562	41	72	111	111	130
18	1.3	1.8	45	6.2	2.9	562	499	36	47	173	73	556
19	1.1	1.8	29	8.6	3.0	409	361	32	40	131	65	684
20	1.4	1.8	23	8.8	3.2	224	200	29	227	85	55	559
21	7.2	1.3	17	8.2	3.5	222	136	26	202	58	44	523
22	5.6	1.0	14	9.0	3.7	218	369	23	96	42	37	485
23	4.3	.70	13	11	3.6	111	383	21	57	33	32	381
24	3.5	1.2	12	10	3.4	74	240	19	43	27	37	230
25	2.7	1.3	11	8.0	3.2	57	139	17	35	22	34	146
26	2.4	1.5	11	6.0	3.4	48	103	15	28	19	156	113
27	2.2	2.3	10	5.2	4.0	41	83	14	24	21	141	95
28	1.8	3.0	10	4.3	4.8	37	68	14	21	18	85	89
29	2.0	3.1	12	3.7	5.8	35	61	13	20	15	59	283
30	2.4	5.8	41	3.4	------	33	54	14	17	13	46	241
31	2.3	------	71	3.2	------	32	------	12	------	11	37	------
TOTAL	73.2	74.20	731.8	368.1	99.4	2,998	4,259	1,333	1,388.1	1,344.8	2,889	6,368
MEAN	2.36	2.47	23.6	11.9	3.43	96.7	142	43.0	46.3	43.4	93.2	212
MAX	7.2	9.0	113	41	5.8	562	562	137	227	209	291	684
MIN	1.1	.70	1.0	3.2	2.8	15	37	12	7.1	7.6	10	16
CFSM	.04	.06	.41	.21	.06	1.69	2.48	.75	.81	.76	1.63	3.71
IN.	.05	.05	.48	.24	.06	1.95	2.77	.87	.90	.87	1.88	4.14

CAL YR 1971 TOTAL 15,596.87 MEAN 42.7 MAX 720 MIN .65 CFSM .75 IN 10.14
WTR YR 1972 TOTAL 21,926.60 MEAN 59.9 MAX 684 MIN .70 CFSM 1.05 IN 14.26

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	0800	9.19	640	8-15	1400	7.54	306
4-17	0700	8.99	577	9-18	2000	9.66	704

04087240 Root River at Racine, Wis.

LOCATION.--Lat 42°45'05", long 87°49'25", in NE 1/4 sec.6, T.3 N., R.23 E., Racine County, on left bank 30 ft downstream from State Highway 38 bridge in Racine, 350 ft downstream from Horlick Dam, and 5.2 miles upstream from mouth.

DRAINAGE AREA.--187 sq mi.

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 610 ft (from topographic map). Prior to Feb. 5, 1964, nonrecording gage on bridge 30 ft upstream.

AVERAGE DISCHARGE.--9 years, 137 cfs (9.95 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,740 cfs Sept. 20 (gage height, 6.54 ft); minimum daily, 3.8 cfs Oct. 17, 18.

Period of record: Maximum discharge, 2,740 cfs Sept. 20, 1972 (gage height, 6.54 ft); minimum daily, 1.3 cfs Oct. 12, Dec. 31, 1963, Jan. 1, 2, 1964.

REMARKS.--Records good except those for winter periods, which are fair.

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 2, 3, 28, 29, Jan. 4-8, 11-17, Jan. 22 to Mar. 15, Mar. 18-21.)

Oct. 1 to Mar. 14

2.0	3.0	2.7	74
2.1	6.8	3.0	146
2.3	20	3.5	325
2.5	41	4.0	575

Mar. 15 to Sept. 30

2.2	12	4.0	663
2.3	21	5.0	1,390
2.5	47	6.0	2,250
2.7	82	7.0	3,200
3.0	160		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	5.3	29	173	14	80	127	167	52	52	27	120
2	7.9	9.6	35	114	16	100	163	232	44	57	145	109
3	9.6	72	21	91	17	120	160	232	41	127	315	102
4	9.0	50	15	90	15	88	145	180	44	95	340	82
5	14	23	12	76	14	74	142	145	46	67	194	74
6	18	16	11	68	14	64	145	142	39	60	136	63
7	11	11	17	50	13	90	180	180	29	58	224	58
8	7.4	8.5	29	35	12	130	177	315	26	63	345	50
9	5.7	7.9	38	35	11	150	125	458	26	67	224	58
10	4.9	6.8	74	47	11	180	114	447	23	57	151	50
11	4.5	7.4	196	56	11	160	114	297	20	52	136	71
12	4.1	7.4	249	47	10	140	117	213	33	47	283	125
13	4.5	7.4	130	35	9.8	180	136	177	112	109	297	601
14	5.3	7.9	74	27	9.4	230	160	160	157	145	198	728
15	4.9	7.9	152	22	9.2	300	157	163	386	546	288	803
16	4.1	6.4	366	20	9.2	355	701	167	424	430	683	748
17	3.8	6.4	460	24	12	452	1,240	148	292	493	302	515
18	3.8	6.4	257	25	12	700	1,240	130	174	577	202	1,460
19	4.1	6.4	141	29	10	820	1,000	125	122	552	148	2,000
20	4.1	7.4	107	34	11	1,100	735	133	458	311	136	2,570
21	33	8.5	78	38	13	980	516	127	464	184	120	2,150
22	28	8.5	67	33	14	933	702	122	365	127	97	1,700
23	15	9.0	61	35	13	810	925	109	204	97	82	1,650
24	10	9.0	54	31	13	452	940	100	139	74	86	1,320
25	7.9	9.6	50	25	12	240	620	93	109	61	154	846
26	7.4	9.6	48	21	14	187	375	86	89	53	397	577
27	11	8.5	46	19	16	151	266	80	67	50	511	402
28	11	9.6	40	16	19	136	232	73	57	57	493	335
29	7.4	26	39	14	25	125	180	63	57	46	292	493
30	6.0	24	91	13	------	114	163	57	50	36	180	632
31	5.3	------	149	12	------	109	------	58	------	29	136	------
TOTAL	282.7	403.4	3,136	1,355	379.6	9,750	11,997	5,179	4,149	4,779	7,322	20,492
MEAN	9.12	13.4	101	43.7	13.1	315	400	167	138	154	236	683
MAX	33	72	460	173	25	1,100	1,240	458	464	577	683	2,570
MIN	3.8	5.3	11	12	9.2	64	114	57	20	29	27	50
CFSM	.05	.07	.54	.23	.07	1.68	2.14	.89	.74	.82	1.26	3.65
IN.	.06	.08	.62	.27	.08	1.94	2.39	1.03	.83	.95	1.46	4.08

CAL YR 1971 TOTAL 45,315.9 MEAN 124 MAX 1,460 MIN 2.5 CFSM .66 IN 9.01
WTR YR 1972 TOTAL 69,224.7 MEAN 189 MAX 2,570 MIN 3.8 CFSM 1.01 IN 13.77

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-17	1800	3.86	500	6-20	1400	3.76	516
3-20	--	--	[a]1,300	7-15	0500	4.14	755
4-16	1930	5.25	1,590	8-28	0930	3.77	522
4-23	2200	4.57	1,070	9-20	0630	6.54	2,740

[a] About.

04087257 Pike River near Racine, Wis.

LOCATION.--Lat 42°30'49", long 87°51'30", in SE 1/4 NE 1/4 sec.11, T.2 N., R.22 E., Kenosha County, on right bank just downstream from unnamed tributary, 1.7 miles downstream from Pike Creek, 6.8 miles southwest of Racine post office and 9.0 miles upstream from mouth.

DRAINAGE AREA.--38.7 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 620 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,200 cfs June 15 (gage height, 7.60 ft, from floodmark); minimum daily, 0.53 cfs Nov. 11.

Period of record: Maximum discharge, 1,200 cfs June 15, 1972 (gage height, 7.60 ft, from floodmark); minimum daily, 0.53 cfs Nov. 11, 1971.

REMARKS.--Records good except those for winter periods, which are fair. Low flows may be affected by occasional regulation of small recreation dam 1.1 miles upstream.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 3-7, 14-17, Jan. 23 to Feb. 11.)

Oct. 1 to Mar. 12				Mar. 13 to Sept. 30			
1.8	0.40	2.3	6.8	2.1	5.0	3.0	64
1.9	.60	2.4	10	2.2	8.2	4.0	167
2.0	1.2	2.6	22	2.3	12	5.0	336
2.1	2.3	3.0	60	2.5	24	6.0	600
2.2	4.1	3.6	122				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.0	2.5	14	4.4	38	24	34	9.3	13	4.7	29
2	3.4	19	2.1	14	5.4	15	26	37	11	13	139	27
3	20	2.2	1.9	10	5.4	12	25	36	13	13	88	17
4	8.0	3.2	1.6	7.0	5.3	10	27	23	11	14	43	19
5	4.6	2.2	1.5	6.0	5.8	4.4	27	24	5.1	12	34	18
6	3.9	1.9	1.6	6.0	4.3	3.6	14	29	7.7	12	34	18
7	4.2	1.6	1.9	6.0	4.0	47	44	38	7.4	13	40	15
8	3.9	1.3	1.9	5.8	5.6	43	24	74	7.0	14	33	20
9	3.5	6.5	2.8	6.5	5.8	17	25	46	6.4	13	28	17
10	3.1	.54	63	5.8	5.4	11	14	40	6.2	8.2	16	15
11	3.1	.53	42	4.9	6.4	21	28	44	6.6	7.8	52	75
12	3.1	1.1	13	4.6	6.9	36	27	45	130	8.6	61	96
13	4.0	2.7	7.5	3.9	5.7	134	41	43	100	17	32	383
14	2.8	2.3	5.4	3.0	4.7	40	38	38	400	25	81	211
15	2.7	2.3	112	2.1	4.1	43	41	31	550	308	232	100
16	2.5	2.7	70	2.8	7.2	52	456	26	154	132	155	40
17	2.5	2.8	34	4.3	9.1	330	364	30	48	116	90	60
18	2.5	2.7	14	5.2	12	143	165	22	44	108	71	500
19	3.7	3.3	13	3.6	8.0	102	126	21	61	93	53	300
20	5.1	3.1	10	3.7	5.7	49	92	20	350	66	45	100
21	10	2.7	4.0	4.0	13	112	78	12	118	63	38	200
22	5.0	2.3	5.5	4.6	16	107	261	20	40	36	28	80
23	3.8	2.4	6.0	4.8	11	64	140	12	67	25	25	210
24	4.0	14	5.1	3.7	9.1	56	55	10	45	23	60	120
25	4.1	1.4	5.5	3.7	4.2	26	56	16	32	20	26	80
26	3.8	1.5	5.5	2.8	7.2	22	57	16	24	13	272	56
27	5.3	3.6	5.8	3.8	6.9	19	64	16	26	18	133	52
28	3.3	1.4	5.6	4.2	36	18	65	17	20	15	86	53
29	2.3	8.4	5.1	4.6	57	17	61	17	20	12	55	143
30	2.3	5.6	69	5.0	------	18	24	15	20	8.5	37	86
31	2.8	------	31	7.0	------	18	------	4.7	------	8.2	33	------
TOTAL	136.5	108.67	536.6	178.0	308.0	1,867.6	2,401	930.7	2,017.5	1,307.3	2,090.7	3,138
MEAN	4.40	3.62	17.8	5.90	10.6	58.0	81.0	30.0	67.0	42.2	67.4	105
MAX	20	19	112	14	57	330	456	74	550	308	272	500
MIN	2.3	.53	1.5	2.1	4.0	3.6	14	4.7	5.1	7.8	4.7	15
CFSM	.11	.09	.45	.14	.27	1.01	2.16	.78	1.73	1.09	1.75	2.71
IN.	.13	.10	.52	.16	.28	1.67	2.40	.89	1.93	1.26	2.02	3.02

WTR YR 1972 TOTAL 15,368.07 MEAN 42.0 MAX 550 MIN .53 CFSM 1.08 IN 14.70

05333500 St. Croix River near Danbury, Wis.

LOCATION.--Lat 46°04'28", long 92°14'50", in SW 1/4 sec.33, T.42 N., R.15 W., Burnett County, on left bank at downstream side of bridge on State Highway 35, 3.5 miles downstream from Namekagon River, 10 miles northeast of Danbury, and at mile 129.2.

DRAINAGE AREA.--1,588 sq mi.

PERIOD OF RECORD.--March 1914 to current year. Prior to October 1933, published as "at Swiss".

GAGE.--Water-stage recorder. Datum of gage is 882.21 ft above mean sea level. Prior to Apr. 23, 1937, nonrecording gage 40 ft downstream at same datum. Apr. 23, 1937, to Jan. 5, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--58 years, 1,297 cfs (11.09 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,140 cfs July 23 (gage height, 6.21 ft); minimum, 788 cfs July 13 (gage height, 0.64 ft).
Period of record: Maximum discharge, 10,200 cfs May 6, 1950 (gage height, 8.22 ft); minimum observed, 393 cfs Aug. 6, 13, 1934 (gage height, -0.20 ft, site then in use).

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS (WATER YEARS).--WSP 1208: Drainage area. WSP 1438: 1915(M), 1919-20, 1923-24(M), 1927(M), 1931(M), 1934, 1935-37(M). WSP 1628: 1918.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 8 to Apr. 9.)

0.6	760	3.0	3,010
.8	900	4.0	4,130
1.0	1,060	5.0	5,440
2.0	1,940	6.0	6,830

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,170	3,420	1,530	1,300	1,000	1,300	1,500	2,570	1,730	1,200	2,660	1,570
2	1,400	3,030	1,560	1,300	1,000	1,300	1,400	2,920	1,570	1,120	2,270	1,450
3	1,560	2,790	1,600	1,300	1,000	1,300	1,300	3,010	1,480	1,060	1,950	1,450
4	1,540	2,510	1,510	1,200	1,000	1,300	1,300	2,870	1,360	1,120	1,990	1,350
5	1,520	2,280	1,450	1,200	1,000	1,300	1,300	2,790	1,240	1,050	1,950	1,280
6	1,570	2,030	1,390	1,200	1,000	1,300	1,300	3,130	1,100	1,050	1,810	1,320
7	1,550	1,880	1,390	1,200	1,000	1,300	1,300	3,210	1,130	1,040	1,760	1,410
8	1,360	1,770	1,300	1,200	1,000	1,300	1,300	3,070	1,050	1,040	1,870	1,350
9	1,210	1,630	1,300	1,100	1,000	1,300	1,300	2,840	954	1,070	1,880	1,350
10	1,200	1,510	1,200	1,100	1,100	1,300	1,340	2,650	1,020	934	1,920	1,360
11	1,220	1,440	1,100	1,100	1,100	1,300	1,500	2,410	958	1,040	1,820	1,260
12	1,160	1,420	1,100	1,100	1,100	1,300	1,670	1,970	944	930	1,680	1,280
13	1,160	1,400	1,200	1,000	1,100	1,300	1,900	1,910	927	883	1,670	1,240
14	1,130	1,390	1,400	1,000	1,100	1,400	2,070	1,920	1,140	940	1,580	1,220
15	1,100	1,380	1,800	1,000	1,100	1,500	2,230	1,840	1,200	1,050	1,540	1,200
16	1,270	1,370	1,700	1,000	1,100	1,600	2,860	1,730	1,250	1,000	1,490	1,170
17	1,820	1,870	1,600	1,000	1,100	1,700	3,590	1,600	1,110	1,000	1,720	1,130
18	1,820	2,630	1,500	1,000	1,100	1,700	4,120	1,510	1,030	1,020	2,300	1,140
19	1,830	2,820	1,600	980	1,100	1,800	4,340	1,510	1,020	962	2,520	1,180
20	1,880	2,680	1,600	980	1,100	1,800	4,460	1,380	1,500	1,090	2,410	1,460
21	1,860	2,500	1,600	980	1,100	1,800	4,520	1,490	1,650	1,600	2,280	1,820
22	1,890	2,320	1,500	980	1,100	1,800	4,440	1,440	1,560	3,640	2,280	1,800
23	1,810	2,240	1,500	980	1,100	1,800	4,160	1,280	1,470	6,460	2,270	1,580
24	1,750	2,030	1,500	980	1,200	1,900	3,960	1,210	1,290	6,460	2,230	1,460
25	1,640	1,980	1,400	1,000	1,200	1,900	3,720	1,190	1,250	5,610	2,140	1,440
26	1,460	1,920	1,400	1,000	1,200	1,800	3,390	1,060	1,100	5,150	2,040	1,400
27	1,610	1,770	1,400	1,000	1,200	1,800	3,070	991	1,100	5,200	1,940	1,420
28	2,610	1,680	1,400	1,000	1,300	1,800	2,880	1,090	1,330	4,820	1,790	1,320
29	3,040	1,580	1,400	1,000	1,300	1,700	2,650	1,650	1,560	4,140	1,760	1,310
30	2,890	1,580	1,300	1,000	------	1,600	2,320	2,490	1,340	3,390	1,660	1,280
31	3,300	------	1,300	1,000	------	1,600	------	2,240	------	2,790	1,610	------
TOTAL	52,330	60,850	44,530	33,180	31,800	47,900	77,190	62,971	37,363	69,859	60,790	41,000
MEAN	1,688	2,028	1,436	1,070	1,097	1,545	2,573	2,031	1,245	2,254	1,961	1,367
MAX	3,300	3,420	1,800	1,300	1,300	1,900	4,520	3,210	1,730	6,460	2,660	1,820
MIN	1,100	1,370	1,100	980	1,000	1,300	1,300	991	927	883	1,490	1,130
CFSM	1.06	1.28	.90	.67	.69	.97	1.62	1.28	.78	1.42	1.23	.86
IN.	1.23	1.43	1.04	.78	.74	1.12	1.81	1.48	.88	1.64	1.42	.96

CAL YR 1971 TOTAL 516,557 MEAN 1,415 MAX 5,710 MIN 761 CFSM .89 IN 12.10
WTR YR 1972 TOTAL 619,763 MEAN 1,693 MAX 6,460 MIN 883 CFSM 1.07 IN 14.52

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	0900	3.43	3,500	5- 8	2300	3.19	3,220
4-21	0300	4.38	4,550	7-23	2000	6.21	7,140

05334000 Shell Lake at Shell Lake, Wis.

LOCATION.--Lat 45°44'46", long 91°55'00", in NE 1/4 sec.25, T.38 N., R.13 W., Washburn County, 500 ft east of Peterson Boat Factory in the village of Shell Lake.

DRAINAGE AREA.--34.0 sq mi, approximately. Area of Shell Lake, 3,200 acres.

PERIOD OF RECORD.--August 1936 to current year (fragmentary).

GAGE.--Nonrecording gage. Datum of gage is 1,215.88 ft above mean sea level. May 3, 1952, to Apr. 21, 1961, 2.3 miles southeast of village of Shell Lake at same datum.

EXTREMES.--Current year: Maximum gage height observed, 3.11 ft May 9; minimum observed, 2.34 ft Oct. 15, 23. Period of record: Maximum gage height observed, 5.13 ft July 17, 1954; minimum observed, -0.92 ft Nov. 28, 1949.

REMARKS.--Lake has no surface outlet. Lake ice covered from Dec. 10 to Apr. 20.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.42											
2												3.00
3									2.88	2.85		
4			2.48									
5											3.02	
6		2.42										
7												
8		2.39								2.78		
9	2.39							3.11				2.88
10									2.76		2.88	
11					2.57							
12											2.92	
13		2.38						3.08				
14												
15	2.34									2.78		2.84
16						2.66						
17									2.80			
18												
19											3.08	
20		2.48		2.50				3.04				
21	2.35									2.92		2.84
22												
23	2.34											2.76
24									2.76			
25								2.96				
26											3.04	
27		2.48						2.98				
28												
29										3.10		
30					------				2.86			2.78
31	2.40	------			------		------		------			------

05338500 Snake River near Pine City, Minn.

LOCATION.--Lat 45°50'30", long 92°56'00", in SE 1/4 NW 1/4 sec.26, T.39 N., R.21 W., Pine County, on left bank at site of former powerplant and dam, 0.5 mile downstream from Cross Lake and 1.5 miles northeast of Pine City.

DRAINAGE AREA.--958 sq mi.

RECORDS AVAILABLE.--June 1913 to September 1917, July 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 919.00 ft above mean sea level, datum of 1929. June 25, 1913, to Sept. 30, 1917, nonrecording gage at site 500 ft downstream at different datum. July 1 to Oct. 28, 1951, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--25 years, 594 cfs (8.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 14,300 cfs July 27 (gage height, 10.38 ft); minimum, 88 cfs Oct. 12 (gage height, 3.00 ft).

Period of record: Maximum discharge 14,300 cfs July 27, 1972 (gage height, 10.38 ft); minimum, 5.5 cfs Oct. 1, 1964 (gage height, 2.57 ft), result of dam rehabilitation 0.5 mile upstream.

A discharge measurement of 12,500 cfs was made May 9, 1950.

REMARKS.--Records good except those for winter periods, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	[illegible]	465	210	155	166	2,530	2,390	1,030	310	7,050	817
2	137	[illegible]	417	205	155	160	2,270	2,240	1,070	293	5,760	697
3	[illegible]	[illegible]	[illegible]	200	155	160	2,110	2,080	1,030	275	4,540	610
4	133	[illegible]	[illegible]	[illegible]	150	160	1,910	2,000	935	264	3,400	538
5	[illegible]	[illegible]	[illegible]	[illegible]	145	160	1,700	1,930	817	246	2,700	478
6	107	[illegible]	[illegible]	[illegible]	145	150	1,550	1,410	706	218	2,340	457
7	102	[illegible]	[illegible]	180	140	160	1,450	1,850	611	207	2,170	422
8	117	[illegible]	[illegible]	175	140	160	1,420	1,860	538	207	2,030	402
9	[illegible]	[illegible]	[illegible]	175	140	160	1,360	1,870	429	224	2,000	364
10	[illegible]	[illegible]	[illegible]	175	135	150	1,330	1,840	390	218	2,010	352
11	[illegible]	[illegible]	[illegible]	175	140	155	1,280	1,750	352	224	2,060	352
12	[illegible]	[illegible]	[illegible]	175	145	159	1,340	1,620	328	230	2,030	334
13	[illegible]	[illegible]	[illegible]	170	[illegible]	[illegible]	1,580	1,500	304	202	1,910	340
14	[illegible]	[illegible]	477	170	150	174	1,470	1,350	322	281	1,770	322
15	[illegible]	[illegible]	[illegible]	165	[illegible]	145	2,200	1,210	293	287	1,560	304
16	[illegible]	[illegible]	[illegible]	150	150	141	2,440	1,120	298	287	1,400	293
17	[illegible]	[illegible]	[illegible]	155	155	216	2,750	1,030	328	293	1,250	264
18	[illegible]	[illegible]	[illegible]	155	155	246	3,060	965	352	304	1,130	246
19	[illegible]	[illegible]	[illegible]	160	155	[illegible]	3,440	855	404	285	986	235
20	[illegible]	[illegible]	[illegible]	150	155	[illegible]	4,980	770	478	304	935	310
21	[illegible]	[illegible]	[illegible]	150	155	[illegible]	4,330	724	485	364	1,020	428
22	[illegible]	[illegible]	[illegible]	155	155	1,150	4,660	688	546	796	1,080	538
23	[illegible]	[illegible]	[illegible]	155	155	1,730	4,690	715	594	2,260	1,160	779
24	[illegible]	[illegible]	[illegible]	155	155	[illegible]	4,520	751	594	4,810	1,280	895
25	[illegible]	[illegible]	[illegible]	150	155	2,540	4,280	798	562	8,660	1,360	895
26	[illegible]	[illegible]	[illegible]	150	155	[illegible]	3,970	789	493	12,600	1,450	855
27	[illegible]	[illegible]	[illegible]	150	160	[illegible]	3,510	789	442	14,200	1,480	751
28	[illegible]	[illegible]	[illegible]	150	160	[illegible]	3,270	779	409	13,700	1,400	706
29	[illegible]	[illegible]	[illegible]	150	160	4,120	2,940	817	370	12,300	1,250	636
30	[illegible]	[illegible]	[illegible]	150	------	[illegible]	2,560	866	346	10,300	1,090	562
31	[illegible]	------	[illegible]	150	------	[illegible]	------	935	------	8,370	955	------
TOTAL	[illegible]	[illegible]	14,174	[illegible]	[illegible]	[illegible]	80,580	40,751	15,861	93,521	62,596	15,182
MEAN	[illegible]	[illegible]	[illegible]	169	151	[illegible]	2,686	1,315	529	3,017	2,018	506
MAX	[illegible]	[illegible]	[illegible]	210	[illegible]	[illegible]	4,990	2,390	1,070	14,200	7,050	895
MIN	[illegible]	[illegible]	[illegible]	150	[illegible]	160	1,280	688	293	202	935	235
CFSM	[illegible]	[illegible]	[illegible]	.18	[illegible]	1.03	2.80	1.37	.55	3.15	2.11	.53
IN.	[illegible]	[illegible]	[illegible]	.20	.17	1.14	3.13	1.58	.62	3.63	2.43	.59

CAL YR 1971 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN 57 CFSM .30 IN 4.09
WTR YR 1972 TOTAL [illegible] MEAN [illegible] MAX 14,200 MIN 102 CFSM 1.28 IN 17.38

05340500 St. Croix River at St. Croix Falls, Wis.

LOCATION.--Lat 45°24'25", long 92°38'49", in NW 1/4 sec.30, T.34 N., R.18 W., Polk County, on left bank, 1,800 ft downstream from powerplant of Northern States Power Co., in St. Croix Falls, and at mile 52.2.

DRAINAGE AREA.--5,930 sq mi, approximately.

PERIOD OF RECORD.--January 1902 to current year. Prior to January 1910, monthly discharge only, published in WSP 1308. Prior to October 1939, published as "near St. Croix Falls."

GAGE.--Water-stage recorder. Datum of gage is 689.94 ft above mean sea level. Prior to July 1905, gage heights and discharge measurements were used by Loweth and Wolff, consulting engineers of St. Paul, Minn., to determine the flow. July 1905 to February 1940, records were computed from power generation at the St. Croix Falls powerplant.

AVERAGE DISCHARGE.--70 years, 4,144 cfs (9.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 43,700 cfs July 25 (gage height, 20.09 ft); minimum daily, 2,110 cfs Mar. 7.

Period of record: Maximum discharge, 54,900 cfs May 8, 1950 (gage height, 25.19 ft); minimum daily, 75 cfs July 17, 1910.

REMARKS.--Records are good. Diurnal fluctuation caused by St. Croix Falls powerplant 1,800 ft upstream.

REVISIONS (WATER YEARS).--WSP 1115: 1929.

Rating table (gage height, in feet, and discharge, in cubic feet per second).

2.3	2,050	8.0	16,400
2.6	2,720	13.0	27,600
3.0	3,800	16.0	34,400
4.0	6,950	18.0	38,900
6.0	11,900	20.0	43,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,520	20,700	4,920	3,030	2,540	2,690	8,770	12,800	7,650	4,110	19,400	6,020
2	2,450	22,300	3,940	3,130	2,490	2,320	8,420	12,500	7,410	3,570	16,200	6,200
3	3,110	22,100	4,850	2,900	2,740	2,560	8,460	13,100	6,900	3,420	13,900	5,040
4	4,010	20,300	5,020	2,740	2,590	2,480	8,340	13,600	5,140	2,430	11,700	4,760
5	3,440	18,000	4,730	3,190	2,660	2,430	7,820	13,400	5,210	3,190	9,870	4,300
6	3,510	15,900	5,000	2,820	2,190	2,520	7,500	13,000	4,360	2,850	9,320	4,520
7	3,390	13,500	5,530	2,980	2,890	2,110	7,490	13,500	3,650	2,920	8,150	3,690
8	3,360	11,600	5,340	2,950	2,700	2,530	7,450	14,400	3,680	2,600	7,880	4,360
9	3,170	10,200	4,720	2,990	2,400	2,350	6,760	13,900	3,420	2,620	9,530	4,040
10	2,820	10,300	3,790	3,000	2,610	2,380	7,080	12,800	2,520	3,330	9,910	3,920
11	2,820	8,890	3,990	3,060	2,240	2,380	6,980	12,400	2,490	2,600	9,710	3,910
12	3,250	6,160	2,730	2,870	2,720	2,460	7,220	9,570	3,250	2,310	9,100	3,730
13	2,740	6,630	2,620	2,830	2,480	2,500	8,000	7,680	2,660	2,440	8,170	3,650
14	2,680	6,430	2,420	2,800	2,510	2,550	11,300	8,030	2,850	3,910	7,660	3,750
15	2,950	6,120	2,630	2,660	2,820	2,590	12,400	7,800	3,570	2,740	7,460	3,350
16	2,300	6,150	2,950	2,610	2,430	2,860	13,900	7,600	2,780	3,230	6,850	3,580
17	3,080	7,200	2,850	2,930	2,620	3,040	17,000	7,320	3,500	3,340	6,740	3,160
18	4,700	10,700	3,320	2,460	2,510	3,200	21,400	6,110	3,050	2,750	6,310	3,130
19	5,640	14,100	3,290	2,630	2,590	3,840	25,300	5,340	3,330	2,840	8,140	3,300
20	5,710	15,500	3,160	2,650	2,320	3,860	26,500	5,460	4,510	3,340	12,400	2,960
21	6,300	15,500	3,390	2,860	2,600	6,800	26,300	5,240	5,610	3,700	12,500	4,420
22	7,320	13,900	3,290	2,760	2,730	7,940	25,400	4,270	7,120	8,790	9,950	9,990
23	7,380	12,400	3,500	2,510	2,520	9,030	24,700	7,680	7,380	24,600	9,390	12,200
24	7,290	11,800	3,430	2,820	2,510	9,750	23,900	6,970	5,530	36,900	9,460	10,900
25	6,730	10,700	3,990	2,700	2,450	10,800	22,200	6,230	4,990	42,500	10,500	9,500
26	6,170	9,390	3,270	2,640	2,550	11,200	20,800	5,590	4,210	42,400	9,950	8,240
27	6,870	8,870	3,380	2,630	2,430	10,900	19,100	4,910	3,860	38,800	9,630	7,170
28	7,390	8,190	3,020	2,670	2,530	10,800	17,100	4,810	4,180	34,400	8,530	6,530
29	13,100	7,440	2,980	2,650	2,580	10,600	15,400	4,540	4,000	30,000	7,960	5,740
30	16,800	6,300	3,110	2,560	------	9,850	14,000	6,080	4,300	26,500	7,300	5,510
31	19,400	------	3,210	2,650	------	9,480	------	6,830	------	23,200	6,260	------
TOTAL	172,400	357,270	113,970	86,680	73,950	160,800	436,990	273,460	133,110	372,330	299,830	161,570
MEAN	5,561	11,910	3,676	2,796	2,550	5,187	14,570	8,821	4,437	12,010	9,672	5,386
MAX	19,400	22,300	5,530	3,190	2,890	11,200	26,500	14,400	7,650	42,500	19,400	12,200
MIN	2,300	6,120	2,420	2,460	2,190	2,110	6,760	4,270	2,490	2,310	6,260	2,960
CFSM	.94	2.01	.62	.47	.43	.87	2.45	1.49	.75	2.03	1.63	.91
IN.	1.08	2.24	.71	.54	.46	1.01	2.74	1.72	.84	2.34	1.88	1.01

CAL YR 1971 TOTAL 1,970,750 MEAN 5,399 MAX 36,100 MIN 1,730 CFSM .91 IN 12.36
WTR YR 1972 TOTAL 2,641,960 MEAN 7,218 MAX 42,500 MIN 2,110 CFSM 1.22 IN 16.57

05356000 Chippewa River at Bishops Bridge, near Winter, Wis.

LOCATION.--Lat 45°50'57", long 91°04'44", in sec.23, T.39 N., R.6 W., Sawyer County, on right bank 15 ft upstream from highway bridge on County Trunk G, 3.2 miles downstream from Lake Chippewa Dam, and 3.7 miles northwest of Winter.

DRAINAGE AREA.--787 sq mi.

PERIOD OF RECORD.--February 1912 to current year. December to April 1913, monthly discharge only, published in WSP 1308.

GAGE.--Water-stage recorder. Altitude of gage is 1,270 ft (from Lake Chippewa datum). See WSP 1708 or 1728 for history of changes prior to July 23, 1930.

AVERAGE DISCHARGE.--60 years, 711 cfs.

EXTREMES.--Current year: Maximum discharge, 5,930 cfs Aug. 21 (gage height, 9.61 ft); minimum, 80 cfs Apr. 6 (gage height, 3.77 ft); minimum daily 93 cfs Apr. 6.

Period of record: Maximum discharge, 7,520 cfs Sept. 4, 5, 1914 (gage height, 11.05 ft); minimum, 14 cfs Apr. 17-20, 1925 (gage height, 3.25 ft).

REMARKS.--Records good. Flow regulated by Moose Lake and Lake Chippewa (see p. 91).

REVISIONS (WATER YEARS).--WSP 1208: Drainage area. WSP 1438: 1913(M), 1915-18(M), 1919, 1920-23(M), 1924, 1925(M), 1927(M), 1928, 1929-30(M), 1939(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Aug. 18-26.)

3.8	86	6.0	1,370
4.2	196	7.0	2,430
4.6	350	8.0	3,770
5.0	560	9.0	5,350
		10.0	6,550

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	1,300	1,360	1,250	1,090	305	142	135	229	1,460	2,240	1,280
2	233	1,430	1,360	1,240	1,080	310	142	143	238	1,140	1,980	1,270
3	230	1,430	1,360	1,240	1,070	310	142	137	237	1,020	1,670	1,270
4	226	1,430	1,360	1,230	1,070	310	143	133	238	855	1,380	1,270
5	226	1,430	1,350	1,230	1,070	307	111	134	240	730	911	1,270
6	225	1,430	1,350	1,220	1,060	308	93	137	239	665	616	1,270
7	226	1,420	1,340	1,210	1,050	301	138	135	240	616	648	1,270
8	259	1,420	1,340	1,210	1,040	301	112	132	241	618	869	1,240
9	301	1,410	1,340	1,200	1,040	301	105	131	240	616	692	1,210
10	301	1,410	1,330	1,200	1,030	308	105	130	240	613	394	1,210
11	271	1,410	1,330	1,200	1,020	302	110	130	242	615	622	1,200
12	246	1,400	1,330	1,190	1,010	301	117	162	244	613	863	1,180
13	249	1,400	1,330	1,190	1,000	301	130	311	245	611	862	1,180
14	248	1,400	1,320	1,180	992	301	128	311	261	614	1,080	972
15	244	1,400	1,320	1,180	984	303	146	264	247	610	1,300	733
16	247	1,390	1,310	1,180	979	305	207	198	264	610	1,310	559
17	248	1,400	1,310	1,170	972	305	235	182	363	616	1,650	559
18	246	1,430	1,310	1,160	966	305	222	182	430	613	1,970	556
19	249	1,420	1,300	1,160	958	305	180	181	441	610	3,350	557
20	247	1,410	1,290	1,150	950	306	163	204	802	609	3,810	568
21	245	1,400	1,290	1,150	941	316	149	215	1,160	615	5,580	566
22	245	1,390	1,290	1,140	934	324	149	176	1,390	656	5,900	561
23	245	1,390	1,280	1,140	925	331	148	173	1,610	895	5,820	561
24	245	1,390	1,280	1,140	914	307	143	172	1,610	2,760	4,970	561
25	246	1,380	1,270	1,130	910	143	138	172	1,610	4,390	4,130	566
26	246	1,380	1,270	1,130	899	141	133	172	1,610	5,140	4,040	572
27	278	1,380	1,270	1,120	888	141	132	201	1,430	5,130	3,760	567
28	478	1,370	1,260	1,110	878	142	129	221	1,340	5,490	2,490	420
29	632	1,370	1,260	1,110	735	142	129	228	1,490	5,240	1,650	235
30	821	1,370	1,250	1,100	-------	142	128	224	1,620	3,910	1,430	230
31	1,040	-------	1,250	1,090	-------	145	-------	224	-------	2,860	1,300	-------
TOTAL	9,667	41,990	40,610	36,350	28,455	8,369	4,269	5,650	20,791	51,540	69,287	25,463
MEAN	312	1,400	1,310	1,173	981	270	142	182	693	1,663	2,235	849
MAX	1,040	1,430	1,360	1,250	1,090	331	235	311	1,620	5,490	5,900	1,280
MIN	224	1,300	1,250	1,090	735	141	93	130	229	609	394	230

CAL YR 1971 TOTAL 264,866 MEAN 726 MAX 2,170 MIN 96
WTR YR 1972 TOTAL 342,621 MEAN 936 MAX 5,900 MIN 93

05356500 Chippewa River near Bruce, Wis.

LOCATION.--Lat 45°27'08", long 91°15'39", in SE 1/4 sec.5, T.34 N., R.7 E., Rusk County, on right bank 1.0 mile east of Bruce and 1.0 mile downstream from Thornapple River.

DRAINAGE AREA.--1,630 sq mi, approximately.

PERIOD OF RECORD.--December 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,059.62 ft above mean sea level. Prior to May 28, 1935, nonrecording gage at railroad bridge 0.8 mile upstream at datum 2.30 ft higher.

AVERAGE DISCHARGE.--58 years, 1,441 cfs.

EXTREMES.--Current year: Maximum discharge, 8,220 cfs Apr. 18 (gage height, 9.47 ft); minimum, 415 cfs June 11 (gage height, 1.49 ft).

Period of record: Maximum discharge, 25,800 cfs Sept. 1, 1941 (gage height, 20.46 ft, from floodmarks), from rating curve extended above 20,000 cfs; minimum, 155 cfs June 10, 1932 (gage height, 0.9 ft, site and datum then in use).

REMARKS.--Records good except those for winter period, which are fair. Flow from 48 percent of the drainage area regulated by Moose Lake and Lake Chippewa (see p. 91).

REVISIONS (WATER YEARS).--WSP 875: 1936-38. WSP 1278: Drainage area. WSP 1308: 1922, 1937(M). WSP 1508: 1914-26(M), 1927, 1928-31(M), 1932, 1933(M), 1934-36, 1938.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 11 to Apr. 9.)

1.5	420	5.0	3,040
2.0	728	8.0	6,410
3.0	1,420	10.0	8,960

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,690	3,160	1,990	1,800	1,400	1,300	2,100	1,120	660	2,420	3,260	1,800
2	1,670	3,380	1,980	1,800	1,400	1,100	2,000	1,870	641	1,950	2,680	1,770
3	1,910	3,520	1,830	1,700	1,400	640	2,000	2,330	667	1,550	2,360	1,720
4	1,590	2,970	1,930	1,700	1,400	700	1,900	1,860	574	1,530	1,970	1,680
5	1,190	2,630	1,810	1,600	1,400	780	1,800	1,560	591	1,260	1,600	1,660
6	989	2,400	1,810	1,600	1,400	860	1,700	1,440	567	1,160	1,300	1,710
7	902	2,210	1,810	1,600	1,400	900	1,500	1,340	572	1,090	1,120	1,920
8	822	2,050	1,810	1,600	1,400	920	1,300	1,240	558	1,040	1,560	1,910
9	800	2,010	1,800	1,600	1,400	920	1,200	1,080	563	1,000	1,950	1,760
10	856	1,930	1,790	1,600	1,400	920	1,120	949	578	1,010	1,450	1,680
11	800	1,910	1,800	1,600	1,400	940	1,550	896	536	999	1,060	1,810
12	780	1,880	1,800	1,600	1,400	960	2,180	822	578	983	1,220	1,840
13	742	1,870	1,900	1,600	1,400	1,000	3,880	846	632	964	1,310	1,730
14	863	1,860	1,900	1,600	1,400	1,100	4,520	1,100	936	1,070	1,300	1,660
15	874	1,860	1,900	1,600	1,300	1,100	3,920	1,060	1,220	1,120	1,600	1,360
16	807	1,860	1,900	1,600	1,300	1,100	5,510	952	964	1,020	1,710	1,200
17	807	2,040	1,900	1,500	1,300	1,200	7,620	875	858	1,170	2,050	953
18	790	2,890	1,900	1,500	1,300	1,300	8,130	747	777	1,700	2,620	977
19	860	3,520	1,900	1,500	1,300	1,400	7,200	661	912	1,470	3,390	912
20	839	3,240	1,900	1,500	1,300	1,500	5,760	661	1,610	1,220	4,130	954
21	923	2,850	1,800	1,500	1,300	1,900	4,390	723	2,750	1,390	5,130	1,270
22	770	2,440	1,800	1,500	1,300	2,600	3,440	612	2,490	1,870	6,490	1,300
23	772	2,240	1,800	1,500	1,300	2,700	3,100	630	2,390	4,740	6,760	1,120
24	697	2,150	1,800	1,500	1,300	2,800	3,050	598	2,190	5,790	6,370	1,070
25	738	2,100	1,800	1,500	1,300	2,800	2,730	599	1,980	5,650	5,630	1,060
26	718	2,080	1,700	1,500	1,300	2,800	2,240	585	1,920	5,750	4,860	1,550
27	764	2,040	1,700	1,500	1,300	2,700	1,800	593	1,910	5,810	4,810	1,790
28	1,060	1,970	1,700	1,500	1,300	2,600	1,550	576	2,220	5,650	3,970	1,720
29	1,360	1,920	1,800	1,400	1,300	2,500	1,400	711	2,870	5,890	2,690	2,190
30	1,610	1,890	1,800	1,400	------	2,400	1,190	779	2,770	5,300	2,120	1,790
31	2,790	------	1,800	1,400	------	2,300	------	710	------	3,980	1,900	------
TOTAL	32,763	70,870	56,860	48,400	39,100	48,740	91,780	30,525	38,484	77,546	90,370	45,866
MEAN	1,057	2,362	1,834	1,561	1,348	1,572	3,059	985	1,283	2,501	2,915	1,529
MAX	2,790	3,520	1,990	1,800	1,400	2,800	8,130	2,330	2,870	5,890	6,760	2,190
MIN	697	1,860	1,700	1,400	1,300	640	1,120	576	536	964	1,060	912

CAL YR 1971 TOTAL 629,416 MEAN 1,724 MAX 14,100 MIN 523
WTR YR 1972 TOTAL 671,306 MEAN 1,834 MAX 8,130 MIN 536

05358300 Pine Creek near Oxbo, Wis.

LOCATION.--Lat 45°54'12", long 90°41'00", in SE 1/4 sec.36, T.40 N., R.3 W., Sawyer County, Chequamegon National Forest, on right bank just downstream from culvert on County Trunk Highway EE, 2.0 miles upstream from mouth and 3.0 miles northeast of Oxbo.

DRAINAGE AREA.--37.8 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1967-70. October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 670 cfs Aug. 18 (gage height, 5.00 ft); minimum daily, 17 cfs Oct. 21, 26.
Period of record: Maximum discharge, 670 cfs Aug. 18, 1972 (gage height, 5.00 ft); minimum daily, 16 cfs Sept. 19-22, 1971.

REMARKS.--Records fair except those for winter periods, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	24	34	20	23	21	28	90	28	67	37	62
2	51	33	28	20	23	21	26	110	24	49	36	53
3	47	36	27	20	23	21	25	102	22	40	37	41
4	43	36	27	20	23	21	32	83	20	39	30	36
5	35	36	27	20	23	21	36	70	18	33	28	38
6	30	35	27	20	23	21	26	80	22	28	28	41
7	28	34	27	20	23	21	28	76	20	28	36	55
8	23	33	26	23	23	21	28	65	20	26	75	48
9	21	32	28	24	23	21	24	58	20	24	75	38
10	21	32	26	25	23	21	25	51	18	22	51	34
11	21	31	25	25	23	21	35	46	18	21	43	34
12	21	30	25	25	22	22	45	42	25	30	38	34
13	22	28	25	25	22	23	58	41	48	34	32	34
14	22	28	24	24	22	23	66	43	104	31	30	32
15	22	31	24	24	22	22	80	40	85	32	28	29
16	21	33	24	24	22	22	150	33	51	26	39	28
17	20	50	23	24	22	22	252	30	36	22	335	27
18	20	86	23	24	22	22	363	29	29	54	637	25
19	20	90	22	24	22	22	363	25	28	43	540	23
20	18	71	22	24	22	23	365	25	103	38	408	29
21	17	59	22	24	22	38	356	24	122	52	321	52
22	18	62	22	24	22	45	301	25	69	31	223	42
23	18	45	21	24	22	42	242	24	46	280	154	30
24	18	43	21	24	22	39	188	23	37	321	111	29
25	18	40	21	24	22	36	163	22	32	252	95	32
26	17	40	21	24	21	33	146	20	28	156	82	81
27	18	39	20	24	21	31	134	20	26	87	72	64
28	19	37	20	24	21	29	121	20	75	65	59	64
29	20	38	20	23	21	28	108	28	138	56	51	91
30	22	46	20	23	------	29	94	52	113	51	44	68
31	27	------	20	23	------	30	------	36	------	44	50	------
TOTAL	765	1,258	742	716	645	812	3,908	1,433	1,425	2,082	3,825	1,294
MEAN	24.7	41.9	23.9	23.1	22.2	26.2	130	46.2	47.5	67.2	123	43.1
MAX	51	90	34	25	23	45	365	110	138	321	637	91
MIN	17	24	20	20	21	21	24	20	18	21	28	23
CFSM	.65	1.11	.63	.61	.59	.69	3.44	1.22	1.26	1.78	3.25	1.14
IN.	.75	1.24	.73	.70	.63	.80	3.85	1.41	1.40	2.05	3.76	1.27

CAL YR 1971 TOTAL 16,106 MEAN 44.1 MAX 565 MIN 16 CFSM 1.17 IN 15.85
WTR YR 1972 TOTAL 18,905 MEAN 51.7 MAX 637 MIN 17 CFSM 1.37 IN 18.60

NOTE.--No gage-height record Dec. 20 to Feb. 9.

05358500 Flambeau River at Babbs Island, near Winter, Wis.

LOCATION.--Lat 45°46'07", long 90°45'41", in SE 1/4 sec.17, T.38 N., R.3 W., Sawyer County, on right bank 3.6 miles upstream from Connors Creek, 11.5 miles upstream from South Fork Flambeau River, 13 miles east of Winter, and at mile 61.9.

DRAINAGE AREA.--1,000 sq mi.

PERIOD OF RECORD.--August 1929 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Altitude of gage is 1,330 ft (from river profile map). Prior to Oct. 1, 1934, at bridge 300 ft upstream at datum 9.0 ft lower. Oct. 1, 1934, to Sept. 8, 1938, at bridge 300 ft upstream at present datum.

AVERAGE DISCHARGE.--43 years, 978 cfs.

EXTREMES.--Current year: Maximum discharge, 5,680 cfs Aug. 18 (gage height, 6.40 ft); minimum, 461 cfs Oct. 10 (gage height, 1.09 ft).
Period of record: Maximum discharge, 9,440 cfs June 25, 1946 (gage height, 9.45 ft); minimum, 86 cfs Oct. 21, 22, 1948 (gage height, 0.20 ft); minimum daily, 118 cfs Oct. 10, 1948.

REMARKS.--Records good except those for winter periods or backwater from vegetation, which are fair. Flow regulated by Rest Lake and Flambeau Flowage reservoirs (see p. 91).

REVISIONS (WATER YEARS).--WSP 855: 1935-36. WSP 1175: Drainage area. WSP 1508: 1930.

Rating table except periods of backwater from vegetation (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Nov. 27 to Apr. 16.)

1.1	466	3.0	1,850
1.3	571	4.0	2,900
1.6	750	6.0	5,320
2.0	1,020	7.0	6,530
2.5	1,420		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	877	941	900	1,000	900	920	1,200	1,360	773	1,010	1,400	2,320
2	649	1,050	880	1,000	900	920	1,200	1,560	727	927	1,400	1,870
3	814	1,100	880	1,000	900	920	1,200	1,420	774	765	1,180	1,650
4	696	984	860	1,000	900	940	1,200	1,240	732	683	1,110	1,750
5	622	839	860	1,000	900	940	1,200	1,050	661	664	967	1,820
6	555	823	840	1,000	900	940	1,200	954	694	753	954	1,310
7	504	795	840	1,000	900	940	1,200	997	688	814	1,180	1,750
8	572	824	840	1,000	900	940	1,200	985	688	733	1,140	1,850
9	490	834	840	1,000	900	960	1,200	988	663	737	1,380	1,550
10	478	768	840	1,000	900	960	1,200	905	706	691	1,240	1,790
11	496	697	860	1,000	880	960	1,200	882	609	727	1,110	1,530
12	597	743	880	1,000	880	960	1,200	1,040	700	660	1,180	1,650
13	535	747	920	1,000	880	980	1,100	932	804	794	1,320	1,670
14	537	729	960	1,000	880	1,000	1,100	836	1,220	779	1,080	1,190
15	633	729	980	1,000	880	1,000	1,000	808	1,260	846	1,160	1,290
16	647	738	960	980	880	1,000	1,100	937	1,060	803	1,330	1,270
17	716	837	960	980	880	1,100	2,130	825	909	743	3,640	1,160
18	630	1,070	940	960	900	1,100	2,840	796	833	959	5,390	1,320
19	632	1,430	940	960	900	1,100	2,700	802	782	764	5,460	1,300
20	722	1,320	940	960	900	1,100	2,480	751	1,050	750	5,240	1,430
21	647	1,270	960	980	900	1,200	2,630	776	1,320	934	4,970	1,570
22	664	1,270	980	960	920	1,200	2,280	787	1,170	1,490	4,510	1,480
23	653	1,130	1,000	940	920	1,200	2,070	717	997	2,280	4,060	1,320
24	793	1,170	1,000	940	920	1,100	1,680	709	881	2,980	3,290	1,330
25	598	1,190	1,000	940	920	1,100	1,600	710	811	2,400	2,910	1,250
26	605	1,220	1,000	920	920	1,100	1,540	706	680	2,070	2,790	1,610
27	660	1,200	1,000	920	920	1,100	1,490	713	816	1,720	2,620	1,680
28	779	1,100	1,000	920	920	1,100	1,450	702	1,020	1,660	2,580	1,470
29	714	1,100	1,000	920	920	1,200	1,360	706	1,520	1,580	2,190	1,720
30	894	1,000	1,000	920	------	1,200	1,200	882	1,170	1,470	2,250	1,550
31	881	------	1,000	920	------	1,200	------	889	------	1,430	1,730	------
TOTAL	20,290	29,648	28,860	30,100	26,120	32,380	46,150	28,345	26,718	35,616	72,761	46,450
MEAN	655	988	931	971	901	1,045	1,538	914	891	1,149	2,347	1,548
MAX	894	1,430	1,000	1,000	920	1,200	2,840	1,560	1,520	2,980	5,460	2,320
MIN	478	697	840	920	880	920	1,000	702	609	660	954	1,160

CAL YR 1971 TOTAL 379,975 MEAN 1,041 MAX 5,200 MIN 376
WTR YR 1972 TOTAL 423,438 MEAN 1,157 MAX 5,460 MIN 478

NOTE.--Backwater from aquatic vegetation July 1 to Aug. 18.

05359500 South Fork Flambeau River near Phillips, Wis.

LOCATION.--Lat 45°42'08", long 90°36'58", in NW 1/4 SW 1/4 sec.10, T.37 N., R.2 W., Price County, on left bank at downstream side of bridge on County Trunk W, 0.4 mile downstream from Big Elk River and 12 miles west of Phillips.

DRAINAGE AREA.--615 sq mi.

PERIOD OF RECORD.--August 1929 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Altitude of gage is 1,360 ft (by barometer). Prior to Jan. 11, 1954, nonrecording gage at site 600 ft downstream at same datum. Jan. 12, 1954, to Sept. 4, 1968, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--43 years, 584 cfs (12.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,260 cfs Apr. 20 (gage height, 11.34 ft); minimum, 198 cfs June 11 (gage height, 5.03 ft).

Period of record: Maximum discharge, 10,200 cfs June 18, 1943 (gage height, 14.32 ft); minimum, 39 cfs Aug. 31, Sept. 3-5, 1933.

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS (WATER YEARS).--WSP 975: 1934. WSP 1175: Drainage area. WSP 1308: 1931-34(M), 1936-42(M), 1944-45(M), 1947-50(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 9 to Apr. 11.)

5.0	189	8.0	1,880
5.5	364	9.0	2,780
6.0	580	10.0	3,730
7.0	1,140	12.0	6,230

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,930	772	540	330	260	250	620	2,230	394	813	521	1,320
2	2,210	903	527	330	260	310	600	2,380	355	734	477	1,270
3	1,970	955	482	330	250	400	600	2,450	317	612	437	1,190
4	1,770	933	440	330	250	500	580	2,410	285	535	400	1,100
5	1,370	943	392	330	250	560	560	2,280	267	485	373	988
6	1,120	936	356	330	240	580	560	2,150	257	452	354	923
7	937	790	338	330	240	580	540	1,800	254	422	353	1,010
8	712	674	333	330	240	600	520	1,410	243	396	477	997
9	604	570	330	330	240	600	500	1,320	224	369	564	845
10	599	504	340	340	240	600	520	1,230	207	348	570	774
11	592	462	350	350	240	580	540	1,130	202	331	541	765
12	584	442	360	350	240	580	675	1,040	219	314	501	722
13	632	426	370	340	240	560	1,060	971	288	298	467	684
14	638	433	350	310	240	560	1,540	920	1,190	309	425	652
15	622	453	340	280	240	540	2,080	851	2,190	317	378	619
16	599	443	340	280	240	540	2,410	796	1,420	306	372	587
17	583	510	340	290	240	520	3,130	740	893	335	1,150	549
18	570	767	350	290	230	500	4,530	642	780	457	2,410	480
19	569	972	350	290	230	520	5,160	544	649	462	3,040	433
20	522	999	350	290	230	560	5,240	505	922	470	3,560	469
21	495	944	350	300	230	600	5,150	480	1,070	582	3,680	733
22	516	744	350	300	230	620	4,710	456	989	805	2,930	949
23	520	723	340	300	230	640	4,130	429	838	1,400	2,210	1,010
24	520	738	340	310	230	640	3,320	403	704	1,630	1,820	912
25	512	731	340	300	230	640	2,810	376	516	1,460	1,670	826
26	497	694	340	290	230	640	2,740	333	390	1,160	1,660	1,190
27	505	651	340	290	230	640	2,740	301	348	878	1,660	1,470
28	535	638	340	280	230	640	2,680	285	486	662	1,530	1,630
29	535	610	340	270	230	640	2,540	277	735	621	1,290	1,850
30	593	552	340	270	------	640	2,270	314	791	594	1,160	1,760
31	724	------	330	260	------	640	------	400	------	563	1,190	------
TOTAL	25,085	20,912	11,328	9,550	6,910	17,420	65,055	31,853	18,423	19,120	38,170	28,707
MEAN	809	697	365	308	238	562	2,169	1,028	614	617	1,231	957
MAX	2,210	999	540	350	260	640	5,240	2,450	2,190	1,630	3,680	1,850
MIN	495	426	330	260	230	250	500	277	202	298	353	433
CFSM	1.32	1.13	.59	.50	.39	.91	3.53	1.67	1.00	1.00	2.00	1.56
IN.	1.52	1.26	.69	.58	.42	1.05	3.94	1.93	1.11	1.16	2.31	1.74

CAL YR 1971 TOTAL 233,596 MEAN 640 MAX 5,830 MIN 190 CFSM 1.04 IN 14.13
WTR YR 1972 TOTAL 292,533 MEAN 799 MAX 5,240 MIN 202 CFSM 1.30 IN 17.69

05360500 Flambeau River near Bruce, Wis.

LOCATION.--Lat 45°22'21", long 91°12'34", in lot 7 of NW 1/4 sec.2, T.33 N., R.7 W., Rusk County, on right bank 2.5 miles downstream from Thornapple powerplant, 6.0 miles upstream from mouth, and 7.0 miles southeast of Bruce.

DRAINAGE AREA.--1,897 sq mi.

PERIOD OF RECORD.--August 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage, 1,060 ft (by river survey, WSP 417).

AVERAGE DISCHARGE.--21 years, 1,794 cfs.

EXTREMES.--Current year: Maximum discharge, 10,800 cfs Apr. 19 (gage height, 8.29 ft); minimum, 321 cfs May 29 (gage height, 2.31 ft).

Period of record: Maximum discharge, 17,400 cfs May 1, 1954 (gage height, 10.90 ft); minimum, about 100 cfs Aug. 7, 9, 1957 (gage height, 2.06 ft).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by several powerplants above station and by Rest Lake and Flambeau Flowage reservoirs (see p. 91).

Rating table gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used July 1 to Aug. 18; stage-discharge relation affected by ice Dec. 8-10, Dec. 12 to Apr. 3.)

2.9	725	4.0	1,930
3.1	905	5.0	3,480
3.4	1,210	7.0	7,610
3.7	1,550	9.0	12,600

DISCHARGE, IN UBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,350	2,370	1,630	1,500	1,100	1,200	1,900	3,970	1,360	2,020	2,040	3,210
2	3,640	2,430	1,570	1,400	1,200	1,200	1,900	4,360	1,350	1,980	2,030	3,900
3	3,280	2,460	1,310	1,300	1,200	1,200	1,900	4,730	1,140	1,690	1,930	3,100
4	2,910	2,560	1,470	1,300	1,200	1,100	1,880	4,310	1,150	1,270	1,680	3,000
5	2,650	2,370	1,500	1,300	1,200	1,100	1,780	3,480	1,180	1,410	1,560	3,370
6	2,240	1,990	1,490	1,300	1,100	1,100	1,750	3,300	975	1,300	1,460	2,820
7	1,870	2,020	1,450	1,400	1,100	1,100	1,850	3,300	957	1,250	1,390	2,670
8	1,480	1,740	1,400	1,400	1,100	1,100	1,820	3,010	1,050	1,450	1,770	3,130
9	1,860	1,800	1,400	1,400	1,200	1,100	1,860	2,660	969	1,240	2,060	3,110
10	1,280	1,740	1,400	1,400	1,200	1,100	1,840	2,500	875	1,090	1,940	2,810
11	1,330	1,440	1,300	1,400	1,100	1,200	1,950	2,470	860	1,140	2,030	2,720
12	1,200	1,370	1,300	1,400	1,100	1,200	2,330	2,160	891	1,080	1,670	2,660
13	1,390	1,290	1,400	1,400	1,100	1,300	4,420	2,300	809	1,030	1,620	2,520
14	1,430	1,410	1,300	1,300	1,200	1,300	4,360	2,110	1,470	1,080	1,810	2,740
15	1,370	1,330	1,300	1,200	1,200	1,400	3,960	1,950	3,130	1,140	1,520	2,360
16	1,430	1,340	1,300	1,200	1,100	1,400	5,000	1,680	3,690	989	1,410	2,300
17	1,460	1,450	1,400	1,200	1,100	1,400	4,740	2,040	2,520	1,410	2,700	2,170
18	1,610	1,830	1,400	1,200	1,200	1,500	6,710	1,650	1,980	1,300	6,480	1,830
19	1,360	2,450	1,500	1,200	1,200	1,500	10,500	1,670	1,700	1,480	8,400	1,940
20	1,400	3,120	1,600	1,200	1,100	1,800	9,660	1,530	1,760	1,490	8,530	1,830
21	1,460	3,140	1,600	1,100	1,200	2,000	8,980	1,450	2,420	1,360	9,470	2,550
22	1,380	2,010	1,600	1,200	1,200	2,000	8,660	1,350	2,330	2,000	8,620	2,580
23	1,360	2,420	1,600	1,300	1,100	2,000	7,940	1,210	2,330	4,450	7,220	1,930
24	1,170	1,930	1,600	1,200	1,200	2,000	6,300	1,320	1,800	4,480	5,690	2,180
25	1,450	1,950	1,600	1,100	1,200	2,000	5,320	1,130	1,650	4,840	4,920	2,650
26	1,450	2,510	1,600	1,000	1,200	2,000	4,680	1,240	1,280	3,080	5,370	2,750
27	1,330	1,940	1,600	1,000	1,200	2,000	4,850	1,080	1,110	3,050	4,920	3,380
28	1,390	1,960	1,600	1,100	1,200	1,900	4,800	971	1,740	2,410	4,420	3,930
29	1,990	2,290	1,600	1,100	1,200	1,900	4,670	1,060	2,080	2,300	4,560	4,200
30	1,700	1,760	1,600	1,200	------	1,900	4,280	1,210	2,510	2,110	3,740	4,280
31	1,670	------	1,600	1,200	------	1,900	------	1,250	------	2,080	3,770	------
TOTAL	53,450	60,400	46,02	38,900	33,760	46,900	132,590	68,451	49,066	58,999	116,730	84,620
MEAN	1,724	2,013	1,48	1,255	1,164	1,513	4,420	2,208	1,636	1,903	3,765	2,821
MAX	3,640	3,140	1,63	1,500	1,200	2,000	10,500	4,730	3,690	4,840	9,470	4,280
MIN	1,170	1,290	1,30	1,000	1,100	1,100	1,750	971	809	989	1,390	1,830

CAL YR 1971 TOTAL 659,627 ME 1,807 MAX 12,300 MIN 506
WTR YR 1972 TOTAL 789,886 ME 2,158 MAX 10,500 MIN 809

05362000 Jump River at Sheldon, Wis.

LOCATION.--Lat 45°18'29", long 90°57'23", in sec.26, T.33 N., R.5 W., Rusk County, on right bank just downstream from highway bridge in Sheldon, 1,500 ft upstream from Shoulder Creek and 11 miles upstream from mouth.

DRAINAGE AREA.--574 sq mi.

PERIOD OF RECORD.--July 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,092.75 ft above mean sea level. Prior to Feb. 9, 1939, and Sept. 1, 1941 to Apr. 1, 1953, Feb. 18, 1954 to Sept. 27, 1964, nonrecording gage at same site and datum. Apr. 2, 1953 to Feb. 18, 1954, nonrecording gage in creamery wellhouse 400 ft upstream at same datum. Feb. 9, 1939 to Aug. 31, 1941, and from Sept. 27, 1964, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--57 years, 509 cfs (12.04 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,700 cfs Apr. 19 (gage height, 11.38 ft); minimum, 68 cfs June 11 (gage height, 3.51 ft).

Period of record: Maximum discharge observed, 46,000 cfs Aug. 31, 1941 (gage height, 18.8 ft from floodmark), from rating curve extended above 13,000 cfs on basis of contracted-opening measurement of peak flow; minimum observed, 11 cfs Dec. 18, 1943 (gage height, 3.99 ft).

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS (WATER YEARS).--WSP 975: 1938. WSP 1175: Drainage area. WSP 1438: 1916-17(M), 1919(M), 1920, 1921(M), 1922, 1923-26(M), 1927, 1928-31(M), 1932, 1933-37(M), 1945-46(M), 1948-50(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used May 10-30, July 19-29, Sept. 9-30; stage-discharge relation affected by ice Nov. 25 to Apr. 11.)

3.6	68	6.5	1,540
4.0	155	8.0	3,290
4.6	342	10.0	6,810
5.5	756	12.0	12,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	660	260	210	110	100	1,100	998	157	171	224	611
2	1,030	898	310	210	110	110	1,000	1,310	129	142	190	492
3	1,540	1,270	300	200	110	110	980	1,460	113	119	164	387
4	1,470	1,150	290	200	110	110	940	1,270	101	106	139	309
5	1,160	986	310	200	100	120	900	1,020	92	99	121	268
6	836	794	310	190	100	130	860	851	87	98	118	245
7	665	589	310	170	100	140	820	739	83	95	123	315
8	565	443	300	160	100	150	820	636	78	93	250	442
9	486	434	300	150	100	190	820	543	75	88	741	370
10	425	368	300	150	100	220	860	463	71	84	682	285
11	381	344	320	150	100	240	1,100	398	69	82	515	336
12	343	332	350	140	100	270	2,050	340	75	79	355	541
13	320	312	390	140	100	290	3,960	301	94	90	247	412
14	319	300	450	140	100	320	4,250	298	168	98	191	302
15	313	292	430	130	98	360	4,160	296	309	95	157	239
16	271	284	380	130	98	380	6,380	294	251	95	137	191
17	269	278	410	130	98	390	9,780	274	204	146	146	155
18	261	431	460	130	98	390	10,300	247	142	269	311	132
19	262	674	430	120	98	400	10,300	220	118	412	526	121
20	274	695	410	120	96	410	8,010	222	122	316	613	142
21	289	619	360	120	96	490	6,010	354	172	238	1,400	839
22	302	443	340	120	96	640	4,770	402	193	276	1,370	1,020
23	298	387	320	120	96	900	3,920	312	160	778	1,780	717
24	282	363	300	120	96	1,500	3,230	230	130	1,530	2,140	921
25	270	327	280	110	96	1,500	2,530	183	112	1,040	1,770	481
26	258	310	270	110	96	1,400	2,020	152	101	644	1,500	4,630
27	255	300	260	110	98	1,400	1,690	131	99	434	1,440	5,400
28	272	290	250	110	98	1,300	1,440	115	109	339	1,220	3,930
29	286	260	240	110	100	1,200	1,230	107	123	279	857	3,190
30	295	240	230	110	------	1,200	1,060	156	174	240	604	2,490
31	443	------	220	110	------	1,100	------	185	------	226	527	------
TOTAL	15,056	15,073	10,090	4,420	2,898	17,460	97,290	14,506	3,911	8,801	20,658	29,313
MEAN	486	502	325	143	99.9	563	3,243	468	130	284	666	977
MAX	1,540	1,270	460	210	110	1,500	10,300	1,460	309	1,530	2,140	5,400
MIN	255	240	220	110	96	100	820	107	69	79	118	121
CFSM	.85	.87	.57	.25	.17	.98	5.65	.82	.23	.49	1.16	1.70
IN.	.98	.98	.65	.29	.19	1.13	6.31	.94	.25	.57	1.34	1.90

CAL YR 1971 TOTAL 200,820 MEAN 550 MAX 12,100 MIN 57 CFSM .96 IN 13.02
WTR YR 1972 TOTAL 239,476 MEAN 654 MAX 10,300 MIN 69 CFSM 1.14 IN 15.52

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	0300	11.38	10,700	9-27	0900	9.62	5,720

05365500 Chippewa River at Chippewa Falls, Wis.

LOCATION.--Lat 44°55'37", long 91°24'33", in lot 1, sec.12, T.28 N., R.9 W., Chippewa County, on right bank at Chippewa Falls, 1.0 mile downstream from Duncan Creek.

DRAINAGE AREA.--5,600 sq mi, approximately.

PERIOD OF RECORD.--June 1888 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 798.46 ft above mean sea level. Prior to January 1914, nonrecording gage, and January 1914 to June 19, 1932, water-stage recorder at site 1 mile upstream at different datum. June 19, 1932, to current year, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--84 years, 5,079 cfs.

EXTREMES.--Current year: Maximum discharge, 41,100 cfs Apr. 19 (gage height, 15.74 ft); minimum daily, 362 cfs June 11.

Period of record: Maximum discharge, 102,000 cfs Sept. 1, 1941 (gage height, 24.8 ft); minimum, 22 cfs Apr. 2, 1934 (gage height, 0.63 ft); minimum daily, 40 cfs Feb. 4, 1917. Maximum stage known, 26.94 ft Sept. 10, 1884, site and datum in use to June 1932.

REMARKS.--Records good. Considerable regulation by Moose Lake, Lake Chippewa, Rest Lake, Flambeau Flowage, and Lake Wissota reservoirs (see p. 91). Diurnal fluctuation caused by hydroelectric plant 1.1 mile upstream.

REVISIONS (WATER YEARS).--WSP 785: 1934(M). WSP 1508: 1897, 1905, 1918(M), 1924(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 24 to Feb. 26, Mar. 22-29.)

1.5	325	8.0	11,200
2.0	583	12.0	24,500
3.0	1,440	16.0	42,400
5.0	4,440		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,500	6,430	4,480	3,670	3,220	5,040	9,250	7,910	2,440	5,550	7,460	7,700
2	6,130	9,440	4,070	3,940	3,680	5,140	9,140	8,960	3,690	4,180	6,370	6,240
3	8,380	10,000	4,310	3,880	3,390	4,800	9,150	12,200	2,200	4,830	5,290	6,720
4	7,570	9,920	3,740	3,990	3,730	4,110	9,100	12,100	374	2,130	5,050	5,890
5	7,440	8,970	3,210	3,300	3,180	3,170	8,460	8,820	2,540	3,740	3,030	5,280
6	5,450	6,920	4,980	3,060	2,370	3,590	6,260	8,200	2,690	3,300	3,750	6,550
7	4,840	4,980	5,470	4,080	3,130	4,430	6,570	5,920	2,190	3,310	4,100	5,900
8	4,070	5,600	4,970	3,420	3,750	4,350	6,650	6,900	2,110	2,220	4,160	6,440
9	2,400	5,260	4,320	3,710	2,900	3,990	6,500	6,080	1,540	1,610	5,160	6,200
10	1,830	5,400	4,310	4,200	3,260	4,020	8,350	5,390	724	4,410	6,340	6,090
11	3,660	4,940	5,410	4,130	3,560	4,480	8,050	4,730	362	2,790	5,090	5,680
12	4,660	4,190	3,600	3,690	2,910	3,520	8,920	4,660	3,100	2,170	4,150	5,860
13	2,450	4,390	3,120	3,780	2,510	3,980	9,170	3,680	2,800	3,010	2,610	5,570
14	3,440	3,330	3,000	4,520	3,600	4,260	9,590	4,010	2,170	3,630	4,630	6,050
15	4,010	4,490	3,860	2,430	3,810	5,920	9,760	5,250	3,740	1,340	4,960	6,020
16	1,480	4,200	4,220	1,910	5,200	4,980	18,900	3,720	4,980	1,360	5,120	4,730
17	2,780	4,480	4,310	4,060	3,880	5,500	29,000	4,430	5,740	5,110	5,460	2,820
18	3,890	5,790	4,290	3,620	4,540	4,520	31,100	3,990	2,790	3,730	5,850	3,450
19	3,630	7,270	4,010	3,790	4,270	4,510	38,400	2,780	3,670	4,200	11,600	4,090
20	3,230	8,990	4,410	3,240	2,900	5,720	35,600	2,300	4,770	4,690	13,500	4,490
21	3,720	8,800	4,280	3,810	4,400	7,640	28,100	2,270	5,140	4,790	14,900	4,290
22	3,140	6,750	4,670	2,740	4,780	6,780	26,400	4,190	5,420	3,580	17,800	6,530
23	2,030	5,440	4,290	3,080	4,550	6,680	23,100	3,030	5,790	8,670	16,300	5,420
24	2,050	5,630	3,750	3,780	4,750	7,650	19,200	2,600	4,680	13,300	16,300	4,760
25	3,550	4,770	4,000	3,900	4,750	7,900	16,500	3,090	4,100	14,100	14,500	5,740
26	3,300	5,790	4,110	3,030	4,250	8,050	13,100	2,670	3,330	13,300	13,400	11,500
27	3,520	5,230	3,840	3,400	3,780	8,060	12,600	1,320	3,900	9,890	15,200	16,700
28	3,720	5,100	5,550	2,810	4,690	9,060	11,000	671	4,460	9,890	13,900	16,800
29	3,500	5,460	3,020	2,760	4,890	8,260	9,850	1,110	6,020	9,890	11,400	15,400
30	4,310	9,290	4,220	2,710	-------	9,140	9,810	3,650	6,080	9,340	10,300	13,400
31	5,340	-------	3,740	3,200	-------	9,310	-------	2,660	-------	7,010	6,810	-------
TOTAL	124,220	183,210	129,560	107,640	110,630	178,560	447,580	149,251	103,560	171,070	264,090	212,310
MEAN	4,007	6,107	4,179	3,472	3,815	5,760	14,920	4,815	3,452	5,518	8,519	7,077
MAX	8,380	10,000	5,550	4,520	5,200	9,310	38,400	12,200	6,080	14,100	17,800	16,800
MIN	1,480	3,330	3,000	1,910	2,370	3,170	6,260	671	362	1,340	2,610	2,820

CAL YR 1971 TOTAL 1,946,950 MEAN 5,334 MAX 48,600 MIN 623
WTR YR 1972 TOTAL 2,181,601 MEAN 5,961 MAX 38,400 MIN 362

05367426 Red Cedar River near Cameron, Wis.

LOCATION.--Lat 45°23'20", long 91°45'55", SW 1/4 NW 1/4 sec.32, T.34 N., R.11 W., Barron County, on downstream side of bridge on town road, 0.8 mile upstream of Cranberry Creek, 1.6 miles southwest of Cameron and 4.3 miles east of Barron.

DRAINAGE AREA.--453 sq mi.

PERIOD OF RECORD.--April 1966 to September 1970 (published as 05367425), June 1971 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 1,060 ft (from topographic map). April 1966 to September 1970, nonrecording gage 2.1 miles upstream at different datum.

AVERAGE DISCHARGE.--5 years, 397 cfs.

EXTREMES.--June to September 1971: Maximum discharge during period, 763 cfs July 1 (gage height, 6.08 ft); minimum observed, 179 cfs July 17 (gage height, 5.14 ft).

Water year 1972: Maximum discharge, 1,860 cfs July 23 (gage height, 9.21 ft); minimum observed, 194 cfs June 13 (gage height, 5.64 ft).

Period of record: Maximum discharge, 4,650 cfs Mar. 30, 1967 (gage height, 10.00 ft, from floodmark); minimum observed, 110 cfs Aug. 30, 1969 (gage height, 5.21 ft).

REMARKS.--Records fair. Flow partially affected by operation of recreation and power dams upstream.

REVISIONS (WATER YEARS).--WRD WIS. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									340	763	458	304
2									310	655	454	304
3									290	529	445	300
4									290	534	441	292
5									350	529	423	433
6									670	579	419	346
7									628	584	423	284
8									611	558	397	284
9									579	524	359	280
10									564	508	272	304
11									548	482	259	304
12									586	450	228	304
13									564	454	192	304
14									540	436	346	304
15									505	406	276	292
16									450	338	224	284
17									371	179	216	276
18									354	209	209	276
19									350	325	574	276
20									371	272	558	276
21									363	359	548	280
22									350	309	533	276
23									333	251	463	280
24									288	272	454	280
25									251	276	416	280
26									235	288	416	260
27									239	288	384	255
28									252	304	388	330
29					------				284	348	380	380
30					------				420	393	380	264
31		------			------		------		------	468	380	------
TOTAL									12,302	12,844	11,681	8,936
MEAN									410	414	377	298
MAX									670	763	574	433
MIN									235	179	192	255

CHIPPEWA RIVER BASIN

05367426 Red Cedar River near Cameron, Wis.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,600	920	380	300	280	260	392	648	200	454	477	346
2	1,700	840	380	300	280	260	388	656	200	426	415	340
3	1,300	720	388	300	270	260	396	661	209	403	415	324
4	940	660	380	290	270	270	385	610	221	396	407	317
5	760	600	380	280	270	280	378	481	221	388	385	284
6	660	540	380	280	270	280	378	488	224	374	381	280
7	580	520	380	290	270	290	400	462	224	370	381	284
8	540	480	371	290	270	300	396	446	221	353	385	297
9	480	470	371	300	260	310	392	411	224	337	356	271
10	450	460	350	300	260	320	388	346	203	334	360	258
11	430	450	350	300	260	330	450	346	200	314	363	274
12	410	440	340	300	260	350	466	356	200	271	367	258
13	410	440	340	300	260	370	697	360	194	242	353	258
14	400	430	330	280	260	400	622	353	224	261	356	258
15	380	420	330	250	270	440	634	350	300	284	422	252
16	370	420	330	240	280	480	622	346	290	271	403	249
17	370	450	310	250	280	530	622	340	264	324	422	249
18	370	540	270	260	280	580	706	334	264	330	499	352
19	370	700	260	280	280	700	744	327	264	327	462	352
20	370	740	260	280	270	800	775	300	353	330	407	258
21	360	600	260	240	270	900	756	297	506	415	374	307
22	350	510	300	240	270	1,000	775	287	458	541	381	337
23	350	460	350	270	270	1,100	775	274	502	1,860	374	363
24	350	450	360	270	270	860	795	264	481	1,460	363	363
25	350	440	350	270	270	700	800	252	462	1,290	360	363
26	360	430	340	260	270	640	760	233	454	1,160	385	422
27	400	430	320	260	270	570	711	221	442	1,050	378	446
28	600	410	320	260	270	520	697	218	580	756	370	430
29	580	410	310	260	260	470	630	224	648	835	360	446
30	640	432	310	270	------	440	639	206	558	760	353	442
31	800	------	300	270	------	410	------	197	------	656	353	------
TOTAL	18,030	15,612	10,400	8,620	7,820	15,420	17,569	11,294	9,791	17,572	12,067	9,680
MEAN	582	527	335	278	270	497	586	364	326	567	389	323
MAX	1,700	920	388	300	280	1,100	800	661	648	1,860	499	446
MIN	350	410	260	240	260	260	378	197	194	242	353	249

WTR YR 1972 TOTAL 154,075 MEAN 421 MAX 1,860 MIN 194

NOTE.--No gage-height record Oct. 1 to Nov. 29.

05368000 Hay River at Wheeler, Wis.

LOCATION.--Lat 45°02'52", long 91°54'39", in SW 1/4 sec.25, T.30 N., R.13 W., Dunn County, on right bank 25 ft downstream from highway bridge in Wheeler, 1.8 miles upstream from Otter Creek, and 2.4 miles downstream from South Fork Hay River.

DRAINAGE AREA.--426 sq mi.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 893.66 ft above mean sea level. Prior to Mar. 25, 1951, nonrecording gage.

AVERAGE DISCHARGE.--22 years, 283 cfs (9.02 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs Mar. 22 (gage height, 7.44 ft); minimum daily, 200 cfs Feb. 6, 7, but may have been less during ice period.

Period of record: Maximum discharge, 13,600 cfs Mar. 31, 1967 (gage height, 15.04 ft), from rating curve extended above 9,000 cfs; minimum, 55 cfs Mar. 13, 1954 (gage height, 2.32 ft), result of freezeup.

Maximum stage known since 1915, 16.6 ft in April 1934, from floodmarks.

REMARKS.--Records good except those for winter periods, which are fair.

REVISIONS.--WSP 1338: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Nov. 18-20, Mar. 17 to Apr. 16, July 13 to Sept. 7; stage-discharge relation affected by ice Dec. 13 to Mar. 20.)

2.6	193	6.0	1,200
3.0	275	8.0	2,090
4.0	538		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,260	1,060	288	270	220	220	395	402	274	269	306	249
2	1,390	882	328	260	210	220	365	463	265	252	301	243
3	1,040	788	308	260	210	220	365	455	259	244	287	235
4	782	618	299	250	210	230	365	411	252	243	271	231
5	596	529	304	250	210	230	344	387	249	238	259	238
6	525	476	302	260	200	230	356	377	251	232	260	247
7	469	425	303	260	200	230	425	364	244	230	289	336
8	426	397	303	260	210	240	439	366	241	230	334	336
9	394	385	302	270	210	240	398	349	242	244	320	286
10	367	373	294	270	210	250	377	331	231	229	278	263
11	342	362	270	270	210	250	432	318	227	221	264	253
12	321	353	240	260	210	260	538	315	238	217	256	250
13	326	350	250	250	210	260	814	317	240	209	243	261
14	321	341	270	250	220	270	1,110	323	278	217	244	259
15	302	336	270	250	220	270	885	315	282	234	257	248
16	290	336	260	250	220	280	690	310	264	221	246	243
17	291	365	300	250	220	300	599	300	248	242	236	241
18	291	516	350	240	220	330	536	294	238	310	233	237
19	296	615	440	240	220	380	513	286	240	260	239	243
20	295	522	390	240	220	600	513	278	292	233	242	264
21	288	437	350	240	220	1,210	477	279	354	242	242	341
22	286	367	330	240	220	1,640	553	287	321	286	252	316
23	281	364	320	240	220	1,450	767	282	279	565	233	282
24	275	352	310	230	220	1,040	761	270	261	1,090	233	271
25	274	342	300	230	220	836	627	270	249	1,130	234	274
26	271	346	290	220	220	720	518	271	244	746	297	377
27	300	339	280	220	220	609	464	268	242	460	428	438
28	593	329	270	220	220	533	431	277	279	376	364	391
29	674	326	270	220	220	489	410	290	312	347	295	397
30	615	308	270	220	------	452	400	306	297	327	268	345
31	940	------	270	220	------	423	------	289	------	315	256	------
TOTAL	15,121	13,539	9,331	7,610	6,240	14,912	15,867	10,050	7,893	10,659	8,467	8,595
MEAN	488	451	301	245	215	481	529	324	263	344	273	287
MAX	1,390	1,060	440	270	220	1,640	1,110	463	354	1,130	428	438
MIN	271	308	240	220	200	220	344	268	227	209	233	231
CFSM	1.15	1.06	.71	.58	.50	1.13	1.24	.76	.62	.81	.64	.67
IN.	1.32	1.18	.81	.66	.54	1.30	1.39	.88	.69	.93	.74	.75

CAL YR 1971 TOTAL 147,485 MEAN 404 MAX 2,260 MIN 210 CFSM .95 IN 12.88
WTR YR 1972 TOTAL 128,284 MEAN 351 MAX 1,640 MIN 200 CFSM .82 IN 11.20

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-2	0300	6.75	1,620	4-14	0900	5.74	1,160
11-1	0100	5.70	1,210	7-25	0900	6.12	1,170
3-22	1900	7.44	1,720				

05369000 Red Cedar River at Menomonie, Wis.

LOCATION.--Lat 44°53'02", long 91°55'57", in NW 1/4 sec.26, T.28 N., R.13 W., Dunn County, on right bank at Menomonie, 900 ft downstream from powerplant of Northern States Power Co., and 1,000 ft downstream from Wilson Creek.

DRAINAGE AREA.--1,760 sq mi, approximately.

PERIOD OF RECORD.--June 1907 to September 1908, May 1913 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 780 ft above mean sea level (Northern States Power Co. bench mark). Prior to Sept. 3, 1908, nonrecording gage at site 1 mile downstream at different datum. May 9, 1913, to Sept. 30, 1923, water-stage recorder at same site at datum 0.42 ft lower than present datum.

AVERAGE DISCHARGE.--60 years, 1,225 cfs.

EXTREMES.--Current year: Maximum discharge, 13,200 cfs July 26 (gage height, 7.18 ft); minimum, 142 cfs May 28 (gage height, 0.84 ft); minimum daily, 577 cfs May 28.

Period of record: Maximum discharge, 40,000 cfs Apr. 4, 1934 (gage height, 16.0 ft, from floodmarks), from rating curve extended above 27,000 cfs on basis of computed flow over Cedar Falls Dam 6 miles upstream; minimum, 21 cfs Dec. 9, 1928 (gage height, 0.65 ft).

REMARKS.--Records good. Flow regulated by powerplants at Menomonie and Cedar Falls.

REVISIONS.--WSP 805: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second).

1.6	518	3.0	2,620
1.8	700	4.0	4,440
2.0	965	5.0	6,580
2.5	1,730	6.0	9,400
		8.0	16,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,070	2,050	2,210	780	1,840	1,760	1,170
2	[illegible]	3,170	[illegible]	[illegible]	1,140	939	2,100	1,370	828	1,440	1,450	1,380
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,060	1,750	1,460	1,340	1,300	637	1,160
4	[illegible]	[illegible]	[illegible]	[illegible]	1,030	1,010	1,750	1,400	998	1,170	632	1,290
5	[illegible]	[illegible]	[illegible]	1,150	1,010	976	1,820	1,840	1,030	1,300	656	1,350
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,250	1,340	1,310	1,020	1,200	1,360	1,390
7	[illegible]	[illegible]	[illegible]	1,130	[illegible]	1,050	1,750	1,490	1,010	1,170	1,660	1,600
8	[illegible]	[illegible]	[illegible]	[illegible]	935	1,140	1,760	1,750	1,070	1,330	1,950	1,500
9	[illegible]	[illegible]	[illegible]	[illegible]	1,030	1,080	1,790	1,600	1,020	1,080	2,370	1,440
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,080	1,800	1,420	849	1,380	1,270	1,360
11	[illegible]	[illegible]	[illegible]	[illegible]	967	1,140	1,790	1,320	988	1,000	592	1,370
12	[illegible]	[illegible]	[illegible]	[illegible]	923	1,170	2,150	1,320	1,360	1,220	1,430	1,450
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,300	2,510	1,460	1,000	1,130	1,440	1,360
14	[illegible]	[illegible]	[illegible]	[illegible]	997	1,340	2,850	1,340	1,930	1,400	1,460	1,310
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,450	3,290	1,500	1,350	1,170	1,350	1,150
16	[illegible]	[illegible]	[illegible]	[illegible]	1,050	1,530	3,380	1,260	1,470	1,130	1,570	1,320
17	[illegible]	[illegible]	[illegible]	[illegible]	1,070	1,900	3,310	1,700	1,200	1,390	1,420	1,130
18	[illegible]	[illegible]	[illegible]	[illegible]	1,100	1,720	3,240	1,550	1,070	1,600	1,540	1,250
19	[illegible]	[illegible]	[illegible]	[illegible]	1,050	2,050	3,080	1,390	1,290	1,490	1,520	1,300
20	[illegible]	[illegible]	[illegible]	[illegible]	1,040	2,270	3,050	1,430	1,460	1,580	1,570	1,600
21	[illegible]	[illegible]	974	[illegible]	1,010	2,050	3,050	1,240	1,940	1,490	1,610	1,440
22	[illegible]	[illegible]	[illegible]	[illegible]	1,090	3,120	2,910	1,440	1,490	1,730	1,330	1,590
23	[illegible]	[illegible]	[illegible]	[illegible]	967	3,530	2,990	1,230	1,430	3,530	1,240	1,390
24	[illegible]	[illegible]	1,410	1,050	1,000	3,530	3,070	1,400	1,560	3,710	1,440	1,330
25	[illegible]	1,500	[illegible]	971	961	3,400	3,030	1,260	1,310	4,260	1,570	1,750
26	[illegible]	[illegible]	1,270	[illegible]	1,100	3,330	2,410	2,020	1,260	6,480	1,670	2,580
27	[illegible]	[illegible]	1,270	999	1,020	2,800	2,460	1,070	1,320	4,630	1,930	2,060
28	[illegible]	[illegible]	[illegible]	1,050	1,000	2,590	2,520	577	1,720	3,400	1,930	1,660
29	[illegible]	[illegible]	[illegible]	[illegible]	1,010	2,340	2,360	1,360	1,940	2,830	1,630	1,880
30	[illegible]	[illegible]	[illegible]	1,020	------	2,240	2,280	1,620	2,220	2,660	1,510	2,140
31	[illegible]	------	1,240	987	------	2,140	------	886	------	2,540	1,360	------
TOTAL	[illegible]	61,410	[illegible]	33,542	[illegible]	58,675	74,410	44,073	39,673	63,580	44,857	44,700
MEAN	[illegible]	2,047	[illegible]	1,082	1,015	1,893	2,480	1,422	1,322	2,051	1,447	1,490
MAX	[illegible]	3,170	[illegible]	1,270	1,140	3,530	3,380	2,210	2,220	6,480	2,370	2,580
MIN	[illegible]	1,300	[illegible]	[illegible]	[illegible]	939	1,340	577	780	1,000	592	1,130
CFSM	1.01	1.16	.70	.61	.58	1.08	1.41	.81	.75	1.17	.82	.85
IN.	1.16	1.29	.81	.71	.62	1.24	1.57	.93	.84	1.34	.95	.94

CAL YR 1971 TOTAL [illegible] MEAN [illegible] MAX 5,630 MIN 769 CFSM .93 IN 12.64
WTR YR 1972 TOTAL [illegible] MEAN 1,597 MAX 6,480 MIN 577 CFSM .91 IN 12.35

05369500 Chippewa River at Durand, Wis.

LOCATION.--Lat 44°37'40", long 91°58'10", in SW 1/4 sec.21, T.25 N., R.13 W., in Pepin County, on left bank 75 ft downstream from bridge on U.S. Highway 10, and 9.5 miles downstream from Red Cedar River.

DRAINAGE AREA.--9,010 sq mi, approximately.

PERIOD OF RECORD.--July 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 694.59 ft above mean sea level. Prior to Dec. 9, 1930, nonrecording gage at bridge 400 ft downstream at same datum.

AVERAGE DISCHARGE.--44 years, 7,404 cfs.

EXTREMES.--Current year: Maximum discharge, 43,100 cfs Apr. 20 (gage height, 11.32 ft); minimum daily, 2,790 cfs June 12.

Period of record: Maximum discharge, 123,000 cfs Apr. 2, 1967 (gage height, 16.93 ft); minimum observed, 1,020 cfs Nov. 24, 1950 (gage height, 0.12 ft).

Maximum stage known, 18.4 ft Sept. 12, 1884.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants, Moose Lake, Lake Chippewa, Rest Lake, Flambeau Flowage, and Lake Wissota on Chippewa and Flambeau Rivers (see p. 91).

REVISIONS (WATER YEARS).--WSP 785: 1930, 1934(M). WSP 875: 1930 (monthly and yearly runoff). WSP 925: 1938. WSP 1508: 1929(M), 1932.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 20 to Mar. 24.)

0.5	2,140	5.0	12,710
1.0	2,960	7.0	19,700
2.0	4,790	10.0	34,300
3.0	7,070	13.0	61,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,240	8,770	7,420	6,400	5,600	7,800	13,800	12,800	4,280	8,190	10,000	9,720
2	7,460	11,600	6,410	6,600	5,800	8,200	13,600	11,500	4,260	7,270	9,220	9,860
3	10,400	12,900	6,640	6,800	5,800	8,200	13,400	12,400	5,020	6,170	7,950	8,680
4	10,800	13,200	6,800	6,600	6,000	8,000	12,800	15,600	4,290	6,130	6,890	8,570
5	7,170	13,000	6,340	6,200	6,000	7,000	12,100	14,400	3,120	4,400	6,280	7,660
6	7,230	11,400	6,070	6,200	5,600	6,600	10,800	11,800	4,070	5,340	5,310	8,110
7	7,630	10,200	7,600	6,600	5,400	6,800	10,500	10,700	4,270	5,350	5,950	8,550
8	8,140	8,470	8,260	6,800	5,600	7,200	10,600	9,360	3,820	5,410	6,700	8,530
9	7,840	8,880	7,110	6,600	5,800	7,400	10,700	9,340	4,130	4,640	7,200	8,730
10	7,120	7,980	6,600	6,800	5,800	7,200	12,000	8,760	3,670	4,080	8,000	8,410
11	5,320	8,500	6,860	6,800	5,800	7,600	12,300	7,900	2,890	5,740	7,500	8,030
12	5,960	7,430	8,070	6,600	5,800	7,600	13,200	7,530	2,790	4,910	6,700	7,550
13	6,560	6,810	5,440	6,400	5,400	7,000	14,900	6,930	4,020	4,960	6,350	8,350
14	5,750	6,990	5,430	6,400	5,400	7,200	16,000	6,440	5,150	4,590	4,970	7,820
15	5,460	6,290	5,420	6,200	5,800	7,600	17,300	6,410	4,440	5,540	6,510	8,020
16	5,900	6,960	6,380	6,000	6,800	10,000	18,600	7,400	5,290	3,890	6,840	7,580
17	4,370	7,090	6,730	5,800	7,000	9,800	28,300	6,180	6,510	3,840	6,970	6,740
18	4,840	8,150	6,910	5,800	7,000	10,000	34,700	6,810	6,350	7,270	7,180	5,330
19	6,130	9,090	6,990	5,800	7,000	9,200	37,400	6,360	4,670	5,950	8,900	5,820
20	5,980	11,000	6,600	6,000	6,800	9,400	41,600	5,490	5,640	6,330	13,300	6,550
21	5,640	11,900	6,800	6,000	6,600	12,000	41,700	4,820	6,710	6,850	14,500	7,010
22	5,810	11,000	6,800	5,800	6,800	20,000	35,500	4,680	7,310	6,950	16,700	8,190
23	5,340	9,600	7,000	5,600	7,400	25,000	32,200	6,150	7,820	8,410	17,900	9,780
24	4,730	8,730	7,000	5,800	7,800	28,000	28,500	5,680	6,910	13,000	17,100	8,390
25	4,790	9,130	6,800	5,800	7,800	21,100	25,900	4,930	6,450	16,400	17,400	7,600
26	5,180	7,620	6,600	6,000	7,600	18,600	21,500	5,490	5,870	19,500	15,900	11,400
27	5,790	9,120	6,600	5,800	7,600	17,200	18,400	5,050	5,400	17,100	16,600	17,700
28	6,520	7,530	7,400	5,600	7,600	15,600	16,900	3,360	6,180	14,100	17,800	21,900
29	6,540	8,310	8,600	5,400	7,600	15,000	14,800	2,820	6,820	13,200	15,200	23,600
30	6,960	8,080	7,200	5,200	------	14,200	13,700	3,960	8,420	13,000	13,800	20,900
31	8,160	------	6,600	5,200	------	14,100	------	5,420	------	11,900	11,900	------
TOTAL	201,760	275,730	211,480	189,600	187,000	360,600	603,700	236,470	156,570	250,410	323,520	295,080
MEAN	6,508	9,191	6,822	6,116	6,448	11,630	20,120	7,628	5,219	8,078	10,440	9,836
MAX	10,800	13,200	8,600	6,800	7,800	28,000	41,700	15,600	8,420	19,500	17,900	23,600
MIN	4,370	6,290	5,420	5,200	5,400	6,600	10,500	2,820	2,790	3,840	4,970	5,330

CAL YR 1971	TOTAL 3,085,410	MEAN 8,453	MAX 56,700	MIN 2,810
WTR YR 1972	TOTAL 3,291,920	MEAN 8,994	MAX 41,700	MIN 2,790

05370000 Eau Galle River at Spring Valley, Wis.

LOCATION.--Lat 44°51'10", long 92°14'17", in SE 1/4 NE 1/4 sec.6, T.27 N., R.15 W., Pierce County, on right bank, 1,500 ft upstream from Mines Creek.

DRAINAGE AREA.--64.8 sq mi.

PERIOD OF RECORD.--March 1944 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is mean sea level (levels by Corps of Engineers). Prior to July 31, 1957, nonrecording gage at site 850 ft downstream at datum of 912.45 ft above mean sea level. Aug. 1, 1957, to June 6, 1966, nonrecording gage at downstream site at datum of 910.45 ft above mean sea level. June 7, 1966, to Oct. 31, 1968, nonrecording gage at downstream site at datum of 909.45 ft above mean sea level.

AVERAGE DISCHARGE.--24 years (1944-68), 25.9 cfs (5.43 inches per year) prior to reservoir operation.

EXTREMES.--Current year: Maximum discharge, 1,050 cfs Mar. 20 (gage height, 916.48 ft); minimum, 5.6 cfs Nov. 10 (gage height, 912.87 ft).

Period of record: Maximum discharge, 7,000 cfs Apr. 15, 1954 (gage height, 12.50 ft, datum then in use); no flow Aug. 11-15, 1971, flow shut off at flood-control dam upstream; minimum observed prior to dam construction period, 5.8 cfs Sept. 25, 27, 28, 30, 1949.

Maximum stage known since at least 1894, 19.98 ft Sept. 18, 1942, with datum at 909.45 ft above mean sea level, from floodmarks (discharge, 33,000 cfs estimated by Corps of Engineers on basis of slope-area measurement by Geological Survey of peak discharge of 39,000 cfs at Elmwood, drainage area, 91.9 sq mi).

REMARKS.--Records good. Flow regulated by flood-control dam 766 ft upstream.

REVISIONS (WATER YEARS).--1967 Water Resources Data for Wisconsin: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	82	14	13	12	12	24	24	13	12	17	13
2	25	56	14	13	12	11	22	30	13	12	16	12
3	22	48	14	12	12	12	20	32	13	12	14	12
4	16	37	14	12	12	12	20	26	12	11	14	13
5	17	26	15	12	12	12	21	22	12	11	13	13
6	18	18	15	12	12	12	28	20	13	11	17	14
7	18	15	15	12	12	11	40	18	12	12	19	15
8	18	28	15	13	12	11	35	17	12	12	28	13
9	19	20	15	13	11	11	28	16	12	13	21	13
10	19	5.6	15	13	11	11	24	16	11	12	16	12
11	23	13	14	13	12	12	28	15	11	18	15	13
12	27	15	14	13	12	12	34	16	12	47	14	13
13	31	14	13	12	12	12	93	17	14	24	14	15
14	29	14	14	8.8	12	12	66	16	20	21	17	13
15	28	14	15	7.0	12	14	76	16	14	17	15	13
16	27	15	14	7.0	12	15	57	15	12	14	14	12
17	27	20	13	12	12	17	40	15	12	19	14	12
18	29	90	13	12	12	32	30	15	12	17	13	12
19	31	69	14	12	12	150	28	14	12	14	13	42
20	29	40	14	12	12	498	31	14	15	26	13	74
21	28	30	13	12	11	634	30	15	14	27	14	98
22	28	24	13	13	11	186	61	14	12	22	15	53
23	28	20	13	12	11	107	103	14	11	120	14	29
24	28	17	13	13	12	67	56	14	11	48	14	20
25	28	16	13	13	12	51	36	13	11	27	15	26
26	29	21	13	12	11	45	27	13	11	26	25	165
27	39	18	14	11	11	39	23	13	13	28	21	71
28	119	16	14	12	11	32	21	14	23	25	16	40
29	57	15	13	12	11	28	21	15	16	21	15	31
30	62	15	14	12	------	26	21	14	13	18	14	27
31	228	------	13	12	------	25	------	13	------	20	14	------
TOTAL	1,145	831.6	430	367.8	339	2,129	1,144	526	392	717	494	909
MEAN	36.9	27.7	13.9	11.9	11.7	68.7	38.1	17.0	13.1	23.1	15.9	30.3
MAX	228	90	15	13	12	634	103	32	23	120	28	165
MIN	16	5.6	13	7.0	11	11	20	13	11	11	13	12

CAL YR 1971 TOTAL 10,525.20 MEAN 28.8 MAX 718 MIN 0
WTR YR 1972 TOTAL 9,424.40 MEAN 25.7 MAX 634 MIN 5.6

Reservoirs in Chippewa River Basin

The five reservoirs listed below are used to stabilize the flow of the Chippewa and Flambeau Rivers for power utilization, and are also used for recreational purposes. The first four are operated by Chippewa-Flambeau Improvement Co. The remaining one is operated by the Northern States Power Co., which also furnishes the gage heights and capacity tables for all the reservoirs. Month-end contents are computed by the Geological Survey. The usable capacity of these reservoirs is usually less in summer than in winter, because the allowable summer drawdown is limited by the Department of Natural Resources in the interest of riparian property owners. There are occasionally formal or informal changes in capacity and in minimum drawdown levels. Usable capacity figures listed below are for winter regulation.

05355400 Moose Lake on West Fork Chippewa River, lat 46°02'00", long 91°04'32", in NE 1/4 sec.14, T.41 N., R.6 W., Sawyer County, 15.0 miles north of Winter, Wis., completed in 1893, has a usable capacity of 400,000,000 cu ft. Drainage area, 225 sq mi. Datum of gage is at mean sea level (Northern States Power Co. bench mark).

05355600 Lake Chippewa on Chippewa River, lat 45°53'20", long 91°04'40", in SE 1/4 sec.2, T.39 N., R.6 W., Sawyer County, 3.2 miles upstream from Geological Survey river-gaging station, 5.5 miles northwest of Winter, Wis., completed in 1923, has a usable capacity of 10,000,000,000 cu ft. Drainage area, 775 sq mi. Datum of gage is at mean sea level (Northern States Power Co. bench mark).

05357300 Rest Lake on Manitowish River, lat 46°08'20", long 89°53'05", in NW 1/4 sec.9, T.42 N., R.5 E., Vilas County, 6.2 miles east of Manitowish, Wis., used as a reservoir since 1887, has a capacity of 660,000,000 cu ft between gage heights 105.00 ft and 108.50 ft. This reservoir includes nine lakes controlled by the same dam. Drainage area, 243 sq mi. Altitude of gage is 1,600 ft (by U.S. Geological Survey topographic map).

05357400 Flambeau Flowage on North Fork Flambeau River, lat 46°04'13", long 90°13'23", in SE 1/4 sec.34, T.42 N., R.2 E., Iron County, 0.5 mile upstream from discontinued Geological Survey river-gaging station, 10.2 miles southwest of Mercer, Wis., completed in 1926, has a usable capacity of 5,895,000,000 cu ft. Drainage area, 666 sq mi. Datum of gage is at mean sea level (Northern States Power Co. bench mark).

05364200 Lake Wissota on Chippewa River, lat 44°56'18", long 91°20'27", in NW 1/4 sec.3, T.28 N., R.8 W., Chippewa County, 2.0 miles east of Chippewa Falls, Wis., city limits, completed in 1917, has a usable capacity of 3,547,000,000 cu ft. Drainage area, 5,548 sq mi. Datum of gage is at mean sea level (Northern States Power Co. bench mark).

Month-end contents, in millions of cubic feet, water year October 1971 to September 1972

Date	Moose Lake	Lake Chippewa	Rest Lake	Flambeau Flowage	Lake Wissota
Sept. 30..........	400	8,804	918	4,347	3,898
Oct. 31...........	182	9,928	435	5,268	3,924
Nov. 30...........	60	8,940	350	5,596	3,892
Dec. 31...........	15	6,890	350	4,836	3,844
Jan. 31...........	15	4,552	350	3,710	3,887
Feb. 28...........	15	2,320	350	2,514	2,574
Mar. 31...........	55	3,184	350	1,640	2,149
Apr. 30...........	372	6,710	477	3,980	3,946
May 31...........	400	9,280	817	5,520	3,900
June 30...........	393	9,856	1,010	5,376	3,919
July 31...........	393	10,000	991	5,900	3,884
Aug. 31...........	393	9,676	973	5,900	3,924
Sept. 30..........	393	9,280	973	5,634	3,978

05379400 Trempealeau River at Arcadia, Wis.

LOCATION.--Lat 44°15'15", long 91°30'25", in SW 1/4 sec.32, T.21 N., R.9 W., Trempealeau County, near right bank on downstream side of bridge on State Highway 93 and 95 in Arcadia, 0.5 mile downstream from Turton Creek.

DRAINAGE AREA.--552 sq mi.

RECORDS AVAILABLE.--July 1960 to current year.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 719.61 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 349 cfs (8.59 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,510 cfs Sept. 27 (gage height, 6.85 ft); minimum daily, 200 cfs Jan. 6-9.

Period of record: Maximum discharge, 9,740 cfs Apr. 6, 1965 (gage height, 7.15 ft, from graph based on gage readings) from rating curve extended above 7,000 cfs; maximum gage height observed, 8.04 ft Mar. 2, 1965 (backwater from ice); minimum discharge observed, 110 cfs Aug. 8, 9, 19, 1964.

REMARKS.--Records good except those for winter periods, which are fair.

REVISIONS (WATER YEARS).--WRD Wis. 1970: 1968, 1969.

Rating tables (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 1 to Dec. 13; stage-discharge relation affected by ice Dec. 14 to Mar. 18.)

Oct. 1 to Mar. 19

1.2	227	4.0	1,390
1.5	315	5.0	1,930
2.0	490	6.0	2,820
3.0	920	7.0	4,950

Mar. 20 to Sept. 30

1.1	210	4.0	1,390
1.5	332	5.0	1,930
2.0	518	6.0	2,820
3.0	934	7.0	4,950

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	467	407	394	270	220	280	478	456	322	239	339	335
2	569	400	362	250	220	280	463	494	297	230	316	319
3	475	392	382	230	220	290	448	502	288	227	306	316
4	366	382	371	220	220	290	440	486	275	227	275	306
5	364	382	371	210	220	290	410	440	278	227	266	306
6	352	345	368	200	220	290	467	417	281	227	269	303
7	345	315	376	200	220	290	455	398	278	251	310	335
8	333	321	378	200	220	290	425	373	275	257	303	332
9	330	324	385	200	220	300	402	352	275	332	294	319
10	315	327	400	210	220	300	388	346	263	294	263	297
11	315	321	475	220	230	310	410	332	257	269	263	288
12	312	327	482	230	230	330	486	326	263	346	257	288
13	315	321	424	230	230	350	526	339	395	417	254	352
14	312	327	380	230	240	390	478	339	326	346	260	349
15	303	321	460	220	240	470	486	346	294	326	260	326
16	297	321	340	220	250	900	502	342	275	288	263	300
17	303	339	310	220	250	1.600	463	332	260	413	251	288
18	297	378	300	210	250	3.600	451	326	260	657	248	278
19	318	375	310	210	260	2.640	657	316	257	486	322	319
20	333	368	310	210	260	2.240	766	310	275	380	398	470
21	327	356	320	210	260	2.570	636	306	275	329	550	942
22	333	324	320	210	260	2.550	522	306	254	303	558	665
23	324	321	330	210	270	1.710	766	300	248	373	478	486
24	315	327	320	210	270	1.040	640	294	234	478	425	410
25	312	327	300	210	270	787	518	288	239	359	366	1.290
26	345	339	240	210	270	682	440	294	233	373	707	3.740
27	352	371	260	210	270	665	451	281	227	366	884	3.650
28	336	371	240	210	280	538	440	281	245	352	619	2.960
29	345	371	300	210	280	506	432	294	275	332	470	2.370
30	358	358	240	220	------	470	432	332	248	316	395	1.580
31	422	------	280	220	------	467	------	322	------	326	359	------
TOTAL	10.817	10.436	10.720	6.720	7.010	27.815	14.928	10.873	8.177	10.346	11.528	24.519
MEAN	349	348	346	217	244	897	498	351	273	334	372	817
MAX	569	407	482	270	280	3.600	766	502	395	657	884	3.740
MIN	297	315	240	200	220	280	388	281	227	227	248	278
CFSM	.63	.63	.63	.39	.44	1.63	.90	.64	.49	.61	.67	1.48
IN.	.73	.70	.72	.45	.46	1.87	1.01	.73	.55	.70	.78	1.65

CAL YR 1971 TOTAL 151.712 MEAN 416 MAX 2.070 MIN 230 CFSM .75 IN 10.22
WTR YR 1972 TOTAL 153.949 MEAN 421 MAX 3.740 MIN 200 CFSM .76 IN 10.37

05379500 Trempealeau River at Dodge, Wis.

LOCATION.--Lat 44°07'55", long 91°33'14", in SE 1/4 sec.10, T.19 N., R.10 W., on Trempealeau County line, near left fank on downstream side of highway bridge in Dodge, 9.0 miles upstream from mouth.

DRAINAGE AREA.--643 sq mi.

PERIOD OF RECORD.--December 1913 to September 1919, April 1934 to current year.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 661.42 ft above mean sea level. Prior to Oct. 1, 1966, datum 2.00 ft higher.

AVERAGE DISCHARGE.--43 years (1914-19, 1934-72), 392 cfs (8.24 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,950 cfs Sept. 29 (gage height, 10.10 ft); minimum daily, 210 cfs Jan. 6-8.

Period of record: Maximum discharge, 17,400 cfs Apr. 4, 1956 (gage height, 10.35 ft); minimum daily, 98 cfs Jan. 10, 1938.

REMARKS.--Records for the year are fair.

COOPERATION.--Gage-height record collected in cooperation with Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1238: Drainage area. WSP 1388: 1919(M). WSP 1438: 1914, 1915-18(M), 1934-44 (M), 1946-49(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Nov. 6-22, June 25 to July 21; stage-discharge relation affected by ice Dec. 1-3, Dec. 14 to Mar. 19.)

2.1	240	5.0	1,060
2.5	310	6.0	1,450
3.0	430	8.0	2,440
4.0	720	9.0	3,390
		10.0	5,540

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	492	501	360	330	250	330	552	480	349	279	366	370
2	498	477	370	310	250	330	549	516	332	262	392	346
3	489	627	340	280	250	330	549	615	317	255	337	334
4	438	470	405	250	250	330	525	600	306	249	328	323
5	415	440	415	220	250	330	498	549	296	248	314	325
6	405	417	432	210	250	330	486	536	304	250	286	323
7	392	373	417	210	250	330	513	470	306	269	319	337
8	386	339	425	210	260	340	525	440	296	258	312	330
9	373	325	438	220	260	340	498	435	290	332	300	323
10	363	339	440	240	270	350	467	420	285	366	302	312
11	358	328	448	250	270	350	465	407	277	310	288	308
12	358	339	442	250	280	360	519	390	272	334	279	306
13	356	339	440	260	280	380	561	385	323	458	274	351
14	363	337	410	260	290	420	606	400	380	478	272	420
15	361	337	340	260	290	450	606	410	358	417	267	400
16	354	330	370	270	300	600	573	400	317	356	272	382
17	349	334	370	270	300	1,000	582	395	296	400	270	366
18	342	351	380	260	300	1,570	576	382	283	869	264	304
19	344	380	380	250	300	2,900	567	370	279	588	346	304
20	349	398	390	250	310	3,750	806	361	286	486	458	361
21	380	382	390	250	310	2,850	747	346	306	442	624	738
22	370	388	400	250	310	2,920	830	342	302	351	648	633
23	375	361	410	250	310	2,990	911	339	285	435	576	579
24	382	417	400	250	320	3,030	796	330	277	564	478	473
25	356	395	380	250	320	2,570	669	328	262	440	415	588
26	356	413	360	250	320	1,040	612	317	255	425	555	1,680
27	354	452	350	250	320	782	543	312	254	457	876	3,270
28	392	445	330	250	330	684	519	300	252	400	760	5,210
29	390	455	320	250	330	624	480	321	277	373	585	4,290
30	398	442	320	250	------	612	475	325	310	334	450	3,260
31	425	------	330	250	------	579	------	312	------	330	392	------
TOTAL	11,957	11,931	12,212	7,810	8,330	33,801	17,605	12,533	8,932	12,015	12,605	27,546
MEAN	386	398	394	252	287	1,090	587	404	298	388	407	918
MAX	498	627	498	330	330	3,750	911	615	380	869	876	5,210
MIN	342	325	320	210	250	330	465	300	252	248	264	304
CFSM	.60	.62	.61	.39	.45	1.70	.91	.63	.46	.60	.63	1.43
IN.	.69	.69	.71	.45	.48	1.96	1.02	.73	.52	.70	.73	1.59

CAL YR 1971 TOTAL 167,388 MEAN 459 MAX 2,050 MIN 240 CFSM .71 IN 9.68
WTR YR 1972 TOTAL 177,277 MEAN 484 MAX 5,210 MIN 210 CFSM .75 IN 10.26

05381000 Black River at Neillsville, Wis.

LOCATION.--Lat 44°33'35", long 90°36'54", in sec.15, T.24 N., R.2 W., Clark County, on right bank at downstream side of bridge on U.S. Highway 10 in Neillsville, 1.0 mile downstream from O'Neill Creek, and 2.6 miles upstream from Cunningham Creek.

DRAINAGE AREA.--756 sq mi.

PERIOD OF RECORD.--April 1905 to March 1909, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 962.77 ft above mean sea level (levels by U.S. Weather Bureau). Prior to Oct. 24, 1934, nonrecording gage.

AVERAGE DISCHARGE.--62 years (1905-8, 1913-72), 575 cfs (10.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,600 cfs Sept. 26 (gage height, 14.62 ft); minimum, 37 cfs June 27, 28 (gage height, 2.63 ft).
Period of record: Maximum discharge, 48,800 cfs Sept. 10, 1938 (gage height, 23.8 ft); minimum, 0.6 cfs Aug. 15, 1936 (gage height, 1.84 ft).

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, which are fair.

REVISIONS (WATER YEARS).--WSP 805: Drainage area. WSP 1308: 1914. WSP 1438: 1905, 1906-8(M), 1914-17(M), 1918-19, 1920-25(M), 1926-27, 1928-29(M), 1930, 1931(M), 1932, 1933(M), 1934, 1935(M), 1936. WSP 1508: 1950.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Apr. 9 to May 7; stage-discharge relation affected by ice Nov. 27 to Apr. 8.)

2.5	27	4.0	401	10	6,760
2.7	50	5.0	870	12	10,600
3.0	101	6.0	1,520	14	15,100
3.5	226	8.0	3,520	15	17,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266	327	150	460	90	100	960	757	77	47	496	350
2	1,220	618	170	450	88	100	900	976	79	42	747	250
3	955	712	170	420	86	100	820	911	78	42	599	210
4	776	724	180	380	82	100	760	793	73	58	333	190
5	487	629	170	350	80	100	740	622	71	62	253	170
6	339	483	170	300	78	100	780	495	66	55	190	160
7	242	362	180	280	76	100	900	404	62	56	168	150
8	187	274	190	240	74	110	1,100	345	60	52	693	150
9	156	223	210	210	74	110	1,490	295	55	58	1,200	140
10	138	211	290	190	72	110	2,120	250	50	56	1,110	130
11	127	191	620	180	70	110	4,520	217	46	66	789	120
12	121	174	540	170	70	120	5,470	192	47	100	468	120
13	120	166	500	160	68	120	7,040	176	55	95	295	110
14	119	161	520	160	68	130	7,510	166	75	201	217	100
15	116	156	500	150	66	140	8,880	181	66	394	652	98
16	117	161	580	150	68	160	10,200	197	56	555	2,000	96
17	117	173	560	140	68	180	10,500	204	53	774	1,400	96
18	114	201	520	140	70	200	8,710	194	50	506	900	110
19	121	243	540	130	72	290	9,150	175	48	387	600	160
20	122	284	520	130	74	450	6,730	146	48	403	500	340
21	121	310	500	120	80	3,000	4,520	126	52	299	400	200
22	134	271	470	120	82	2,500	4,700	120	56	207	350	110
23	122	208	420	120	86	2,200	4,610	107	53	183	320	220
24	124	198	390	110	90	2,100	3,390	95	44	161	310	150
25	131	216	370	110	92	1,800	2,340	87	41	411	300	130
26	128	169	370	110	94	1,700	1,630	78	40	429	1,500	13,000
27	127	170	370	100	98	1,500	1,180	73	38	269	2,500	7,000
28	132	170	390	100	100	1,500	885	67	39	188	1,500	4,900
29	144	180	400	98	100	1,400	718	69	39	150	900	11,000
30	173	170	430	94	------	1,200	609	79	47	126	780	5,000
31	275	------	450	92	------	1,100	------	76	------	113	490	------
TOTAL	7,571	8,535	11,840	5,964	2,316	22,930	113,862	8,673	1,664	6,545	22,960	44,960
MEAN	244	285	382	192	79.9	740	3,795	280	55.5	211	741	1,499
MAX	1,220	724	620	460	100	3,000	10,500	976	79	774	2,500	13,000
MIN	114	156	150	92	66	100	609	67	38	42	168	96
CFSM	.32	.38	.51	.25	.11	.98	5.02	.37	.07	.28	.98	1.98
IN.	.37	.42	.58	.29	.11	1.13	5.60	.43	.08	.32	1.13	2.21

CAL YR 1971 TOTAL 205,835 MEAN 564 MAX 14,000 MIN 37 CFSM .75 IN 10.13
WTR YR 1972 TOTAL 257,820 MEAN 704 MAX 13,000 MIN 38 CFSM .93 IN 12.69

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-17	0100	12.73	11,700	9-26	-	14.62	16,600
8-27	-	-	a16,000	9-29	-	13.81	14,600

NOTE.--No gage-height record Aug. 16 to Sept. 25, 27-30.

a About.

05382000 Black River near Galesville, Wis.

LOCATION(revised).--Lat 44°04'22", long 91°17'41", in SW 1/4 sec.1, T.18 N., R.8 W., La Crosse County, on left bank 1,000 ft upstream from bridge on U.S. Highway 53, 4.5 miles southeast of Galesville, and 4.8 miles downstream from Fleming Creek.

DRAINAGE AREA.--2,120 sq mi, approximately.

PERIOD OF RECORD.--December 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 658.43 ft above mean sea level, unadjusted. Prior to Apr. 2, 1941, nonrecording gage on bridge 1,000 ft downstream at same datum. Apr. 3, 1941 to Oct. 1, 1971, water-stage recorder at site 1,100 ft downstream at same datum.

AVERAGE DISCHARGE.--40 years (1932-72), 1,643 cfs (10.52 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,600 cfs Sept. 29 (gage height, 12.25 ft); minimum daily, 394 cfs July 6.

Period of record: Maximum discharge, 65,500 cfs Apr. 1, 1967 (gage height, 14.63 ft); minimum observed, 180 cfs Dec. 20, 1932.

REMARKS.--Records good except those for winter periods, which are fair. Flow partly regulated by Hatfield Dam powerplant where drainage area is 1,290 sq mi and storage capacity is 272 million cubic feet. Water diverted periodically from the basin into the Lemonweir River basin for cranberry culture.

REVISIONS (WATER YEARS).--WSP 1438: 1932-34, 1935-36(M).

Rating tables (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 1-11, Aug. 5-7, Aug. 12 to Sept. 11; stage-discharge relation affected by ice Nov. 28, 29, Dec. 20 to Mar. 22.)

Oct. 1 to Apr. 18				Apr. 19 to Sept. 30			
1.7	520	6.0	4,300	1.7	385	6.0	4,050
2.3	870	8.0	6,920	2.3	710	8.0	6,790
3.0	1,340	10.0	10,200	3.0	1,180	10.0	10,600
4.0	2,150	12.0	15,800	4.0	1,950	12.0	16,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,260	716	1,910	1,400	660	740	4,010	2,190	730	426	578	1,560
2	1,310	810	1,140	1,300	720	800	3,500	2,300	686	455	596	1,400
3	1,290	1,070	1,170	1,000	780	820	3,440	2,720	686	445	710	1,300
4	990	1,400	1,140	650	760	860	3,150	3,300	632	426	905	1,210
5	1,080	1,500	1,020	800	740	850	2,850	3,080	566	435	944	1,030
6	1,080	1,530	762	900	740	820	2,660	2,850	560	394	847	840
7	942	1,510	910	940	720	760	2,770	2,390	602	417	614	886
8	974	1,450	1,040	960	660	800	2,970	2,130	578	412	1,000	905
9	876	1,180	1,090	850	600	840	3,290	1,930	548	445	1,200	847
10	904	1,150	1,170	700	680	900	3,470	1,840	515	470	1,400	788
11	930	1,120	1,340	840	740	920	3,790	1,850	490	430	1,500	662
12	828	1,110	1,780	860	740	920	4,430	1,700	495	602	1,360	632
13	858	1,070	2,000	1,000	740	880	5,100	1,540	510	470	1,320	600
14	1,050	972	4,300	960	680	840	7,670	1,410	542	505	944	580
15	852	744	5,170	900	620	960	11,300	1,090	505	465	710	580
16	768	560	3,940	740	600	1,100	12,700	1,020	510	480	827	580
17	726	888	5,900	580	640	1,300	13,300	1,240	495	515	847	560
18	600	984	5,100	520	700	1,600	14,500	1,180	465	626	1,240	660
19	619	984	4,550	700	700	2,000	15,600	1,170	490	1,240	1,150	860
20	654	1,040	4,500	740	740	2,500	13,300	1,100	480	1,070	1,050	1,000
21	702	1,060	3,900	760	700	2,500	14,200	1,020	510	951	964	716
22	762	942	3,100	780	620	3,700	12,100	768	470	879	1,210	1,030
23	702	798	2,400	780	700	5,040	10,000	762	460	931	1,290	1,240
24	669	1,010	2,700	650	780	7,330	10,100	827	421	662	1,180	1,680
25	654	1,030	2,700	620	780	8,370	9,640	801	435	656	1,180	2,460
26	594	1,030	2,700	680	760	8,120	8,030	808	403	834	1,280	3,670
27	619	840	2,000	740	740	7,440	5,610	788	408	879	1,410	4,970
28	619	700	1,600	760	720	6,970	4,390	749	460	957	2,060	8,980
29	666	680	1,400	720	700	5,810	3,420	698	460	998	2,530	15,900
30	822	840	1,400	660	------	4,910	2,440	680	430	808	2,550	13,800
31	804	------	1,400	620	------	4,560	------	743	------	584	2,080	------
TOTAL	26,158	30,726	75,402	25,000	20,460	85,950	213,810	46,674	15,542	19,867	37,476	71,926
MEAN	844	1,024	2,432	806	705	2,773	7,127	1,506	518	641	1,209	2,398
MAX	1,310	1,530	5,900	1,400	780	8,370	15,600	3,300	730	1,240	2,550	15,900
MIN	594	560	762	520	600	740	2,440	680	403	394	578	560
CFSM	.40	.48	1.15	.38	.33	1.31	3.36	.71	.24	.30	.57	1.13
IN.	.46	.54	1.32	.44	.36	1.51	3.75	.82	.27	.35	.66	1.26

CAL YR 1971 TOTAL 626,147 MEAN 1,715 MAX 18,300 MIN 520 CFSM .81 IN 10.99
WTR YR 1972 TOTAL 668,991 MEAN 1,828 MAX 15,900 MIN 394 CFSM .86 IN 11.74

PEAK DISCHARGE (BASE, 12,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	0500	11.88	16,100	9-29	0200	12.25	17,600

NOTE.--No gage-height record Apr. 12 to May 24, Sept. 12-30.

05389500 Mississippi River at McGregor, Iowa

LOCATION.--Lat 43°01'29", long 91°10'21", in SE 1/4 SE 1/4 sec.22, T.95 N., R.3 W., Clayton County, on right bank in city park at east end of Main Street in McGregor, 2.6 miles upstream from Wisconsin River, 4.3 miles downstream from Yellow River, and at mile 633.4 upstream from Ohio River.

DRAINAGE AREA.--67,500 sq mi, approximately.

PERIOD OF RECORD.--August 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 605.30 ft above mean sea level, adjustment of 1912. Prior to June 1, 1937, and since June 2, 1939, auxiliary water-stage recorder; June 1, 1937, to June 1, 1939, auxiliary nonrecording gage 14.1 miles upstream in tailwater of dam 9, at datum 5.30 ft lower.

AVERAGE DISCHARGE.--36 years, 33,090 cfs (6.66 inches per year, 23,970,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 116,000 cfs Apr. 29; maximum gage height, 16.32 ft Apr. 27; minimum daily discharge, 17,000 cfs Oct. 15; minimum gage height, 6.48 ft Oct. 14, 15.

Period of record: Maximum daily discharge, 276,000 cfs Apr. 24, 1965; maximum gage height, 25.38 ft Apr. 24, 1965; minimum daily discharge, 6,200 cfs Dec. 9, 1936; minimum gage height, -0.86 ft Aug. 18, 1936.

Maximum stage since at least 1828, that of Apr. 24, 1965.

REMARKS.--Records good except those for winter period, which are fair. Stage-discharge relation affected by backwater from Wisconsin River and Dam 10. Flow regulated by reservoirs and navigation dams.

COOPERATION.--Gage height record at Dam 9 collected in cooperation with Corps of Engineers.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23,800	38,300	54,800	25,000	20,000	20,000	95,500	111,000	44,600	37,800	81,200	62,100
2	25,100	40,400	52,000	27,000	20,000	20,000	96,800	107,000	44,100	36,900	91,100	60,000
3	26,500	41,600	47,600	27,000	21,000	20,000	93,900	103,000	43,700	35,400	97,900	58,400
4	26,700	42,700	45,700	26,000	21,000	21,000	92,800	98,300	42,500	33,700	101,000	55,200
5	27,700	45,900	44,500	26,000	21,000	21,000	91,300	94,000	42,900	30,600	101,000	50,600
6	28,500	51,400	42,800	23,000	21,000	22,000	88,000	91,700	44,000	28,200	99,700	46,300
7	27,700	55,300	40,200	24,000	21,000	22,000	85,400	89,700	44,900	29,100	96,800	44,800
8	25,200	59,400	38,400	23,000	21,000	22,000	82,700	88,700	45,400	29,000	92,200	42,400
9	23,800	63,100	37,200	23,000	20,000	22,000	79,100	86,600	45,600	28,500	86,000	40,300
10	23,500	63,600	37,500	24,000	20,000	21,000	76,700	84,400	45,300	29,400	79,900	38,100
11	22,700	63,900	38,100	24,000	20,000	21,000	73,500	82,400	45,200	28,500	74,800	37,300
12	19,700	63,900	38,300	25,000	20,000	20,000	70,200	80,400	45,000	28,900	68,600	36,700
13	17,100	62,000	30,600	25,000	20,000	20,000	68,200	78,800	44,600	28,700	62,300	37,200
14	17,500	59,300	23,400	23,000	19,000	27,000	67,200	77,700	44,000	29,200	59,000	39,100
15	17,000	55,800	20,600	23,000	19,000	36,000	68,700	76,700	44,200	29,400	57,400	38,800
16	18,900	54,500	21,500	22,000	20,000	45,000	69,800	75,600	42,900	29,600	55,800	37,700
17	19,300	52,400	26,000	21,000	20,000	50,000	70,600	73,800	41,900	28,200	54,200	36,400
18	19,300	50,800	25,000	21,000	20,000	54,000	73,400	71,500	40,200	27,400	52,600	33,500
19	22,100	48,100	24,900	22,000	20,000	56,000	76,100	67,000	39,000	28,700	52,100	30,700
20	25,300	47,300	25,100	24,000	20,000	60,000	79,300	65,200	39,900	31,600	51,600	28,000
21	28,800	46,400	28,000	23,000	21,000	64,000	84,700	64,200	40,900	33,200	52,800	30,000
22	29,900	44,200	35,000	23,000	21,000	65,500	90,800	61,300	41,300	32,300	54,600	30,500
23	29,200	46,000	36,000	24,000	21,000	66,000	94,500	58,900	41,400	34,400	55,100	30,000
24	27,900	51,000	35,000	24,000	22,000	66,000	98,500	55,600	41,500	38,400	55,100	31,300
25	27,200	53,300	35,000	23,000	22,000	70,200	104,000	51,800	41,400	41,200	55,700	36,700
26	26,700	55,200	35,000	22,000	22,000	77,000	109,000	50,600	40,900	42,400	58,300	48,200
27	29,700	56,200	30,100	20,000	22,000	82,900	112,000	49,900	40,200	45,100	58,800	55,800
28	30,800	56,600	25,000	19,000	22,000	86,000	115,000	49,600	39,800	48,500	59,300	58,600
29	31,600	57,300	27,000	19,000	21,000	89,200	116,000	49,800	39,900	55,200	60,200	60,600
30	33,500	56,300	28,000	19,000	------	92,200	114,000	49,800	38,900	62,700	60,500	66,100
31	36,900	------	25,000	19,000	------	96,100	------	47,300	------	71,400	60,800	------
TOTAL	788,500	1,582.2M	1,053.3M	713,000	598,000	1,453.1M	2,635.7M	2,292.3M	1,276.1M	1,113.6M	2,146.4M	1,301.6M
MEAN	25,440	52,740	33,980	23,000	20,620	46,870	87,860	73,950	42,540	35,920	69,240	43,390
MAX	36,900	63,900	54,800	27,000	22,000	96,100	116,000	111,000	45,600	71,400	101,000	66,100
MIN	17,000	38,300	20,600	19,000	19,000	20,000	67,200	47,300	38,900	27,400	51,600	28,000
CFSM	.38	.78	.50	.34	.31	.69	1.30	1.10	.63	.53	1.03	.64
IN.	.43	.87	.58	.39	.33	.80	1.45	1.26	.70	.61	1.18	.72
AC-FT	1.564M	3.138M	2.089M	1.414M	1.186M	2.882M	5.228M	4.547M	2.531M	2.209M	4.257M	2.582M

CAL YR 1971 TOTAL 14,391,800 MEAN 39,430 MAX 138,000 MIN 10,400 CFSM .58 IN 7.93 AC-FT 28,550,000
WTR YR 1972 TOTAL 16,953,800 MEAN 46,320 MAX 116,000 MIN 17,000 CFSM .69 IN 9.34 AC-FT 33,630,000

05390500 Anvil Lake near Eagle River, Wis.

LOCATION.--Lat 45°57'10", long 89°03'11", in sec.13, T.40 N., R.11 E., Vilas County, near the home of Violet Waggoner on north side of lake, 11 miles northeast of Eagle River.

DRAINAGE AREA.--3 sq mi, approximately. Area of Anvil Lake, 380 acres.

PERIOD OF RECORD.--August 1936 to current year (fragmentary).

GAGE.--Nonrecording gage. Datum of gage is 90.00 ft above datum assumed by Wisconsin Department of Natural Resources; gage readings have been reduced to elevations above this datum. Prior to Aug. 13, 1950, staff gage 0.3 mile south at same datum.

EXTREMES.--Current year: Maximum elevation observed, 4.89 ft Apr. 10; minimum observed, 4.20 ft Jan. 14. Period of record: Maximum elevation observed, 7.20 ft May 3, 7, 17, 21, 24, 28, June 20, 24, 1943; minimum observed, 2.10 ft July 31, 1964.

REMARKS.--Add 90 ft to obtain elevation above datum assumed for this lake by Wisconsin Department of Natural Resources. Lake has no surface outlet. Lake was ice covered about Nov. 20 to Apr. 16.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		4.25										
2												4.59
3												
4												
5	4.29										4.39	
6												
7												
8						4.45				4.39		
9					4.23							4.59
10							4.89	4.82	4.49			
11												
12	4.29								4.49		4.39	
13								4.74				
14				4.20								
15										4.44		
16												
17									4.49	4.44		
18												
19											4.59	
20								4.74				
21							4.64					
22										4.59		
23												4.64
24									4.39			
25												
26											4.59	
27	4.39							4.64				
28												
29							4.84			4.54		4.63
30					------				4.49			4.64
31		------			------		------		------			------

05391000 Wisconsin River at Rainbow Lake, near Lake Tomahawk, Wis.

LOCATION.--Lat 45°49'58", long 89°32'51", in S 1/2 SW 1/4 sec.30, T.39 N., R.8 E., Oneida County, on right bank 400 ft upstream from Gilmore Creek, 0.3 mile downstream from Rainbow Lake, and 2.5 miles northeast of Lake Tomahawk. Records include flow of Gilmore Creek.

DRAINAGE AREA.--750 sq mi, approximately, includes that of Gilmore Creek.

PERIOD OF RECORD.--July 1936 to current year. Prior to October 1955, published as "at Rainbow Reservoir, near Lake Tomahawk."

GAGE.--Water-stage recorder. Datum of gage is 1,570.05 ft above mean sea level (Public Service Commission of Wisconsin bench mark).

AVERAGE DISCHARGE.--36 years, 696 cfs.

EXTREMES.--Current year: Maximum daily discharge, 1,780 cfs Sept. 30 (gage height, 4.76 ft); minimum daily, 180 cfs Oct. 7.

Period of record: Maximum discharge, 3,570 cfs Sept. 5, 1941 (gage height, 7.59 ft); minimum, 17 cfs Oct. 10-12, 1940; minimum daily, 35 cfs Apr. 6, 1955.

REMARKS.--Records good. Flow regulated by Rainbow Lake and 12 smaller reservoirs above station (see p.129).

REVISIONS (WATER YEARS).--WSP 895: 1937(M), WSP 1508: 1944.

Rating table (gage height, in feet, and discharge, in cubic feet per second).

0.8	173	2.4	630
1.3	284	3.0	875
1.8	430	4.0	1,350
		5.0	1,920

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	655	810	956	908	882	831	389	620	786	706	970
2	276	778	809	953	903	911	775	359	634	662	497	1,010
3	181	767	808	948	899	936	697	354	655	623	666	1,010
4	277	656	807	946	899	923	663	394	662	588	798	1,010
5	346	586	809	944	896	911	612	538	644	588	822	818
6	262	567	807	944	892	916	555	615	660	584	839	642
7	180	569	804	939	891	915	574	622	648	626	839	602
8	244	676	803	942	888	902	532	691	789	698	734	722
9	336	672	804	940	894	944	514	695	854	694	666	810
10	374	597	807	934	900	928	501	607	904	690	630	798
11	618	574	809	930	899	913	509	571	926	638	686	786
12	584	618	806	904	896	904	499	608	781	670	714	710
13	493	688	803	853	891	904	450	700	682	702	694	626
14	587	713	802	886	886	933	422	800	593	822	616	770
15	667	711	800	938	903	923	416	836	654	750	620	880
16	696	709	802	941	944	924	401	715	773	626	746	884
17	770	686	799	931	930	942	410	590	809	690	439	810
18	812	673	795	926	919	929	376	590	808	578	346	766
19	742	678	794	926	918	899	385	591	777	494	352	762
20	651	680	802	924	917	908	396	592	738	532	472	844
21	696	680	806	927	904	932	353	615	705	794	469	814
22	853	700	804	923	900	927	372	643	705	875	463	626
23	918	766	824	921	920	989	388	658	750	822	830	734
24	888	793	866	921	946	990	407	679	776	609	592	822
25	817	791	868	924	933	955	405	701	749	451	830	869
26	647	789	865	920	929	966	394	707	699	626	778	810
27	554	791	869	918	915	943	393	679	682	742	875	616
28	729	791	905	909	904	933	392	664	686	834	1,280	525
29	907	790	953	902	884	926	396	645	674	848	1,490	1,210
30	800	805	956	902	------	921	389	470	698	826	1,250	1,780
31	749	------	960	907	------	913	------	507	------	806	1,100	------
TOTAL	17,986	20,949	25,756	28,679	26,308	28,742	14,407	18,825	21,735	21,274	22,839	25,036
MEAN	580	698	831	925	907	927	480	607	725	686	737	835
MAX	918	805	960	956	946	990	831	836	926	875	1,490	1,780
MIN	180	567	794	853	884	882	353	354	593	451	346	525

CAL YR 1971 TOTAL 260,963 MEAN 715 MAX 1,180 MIN 180
WTR YR 1972 TOTAL 272,536 MEAN 745 MAX 1,780 MIN 180

NOTE.--No gage-height record June 28 to Sept. 30.

05393000 Tomahawk River at Bradley, Wis.

LOCATION.--Lat 45°32'21", long 89°44'47", in NW 1/4 NW 1/4 sec.9, T.35 N., R.6 E., Lincoln County, at dam at outlet of Lake Nokomis, 0.5 mile northeast of Bradley, 4.0 miles upstream from Jersey powerplant, and 4.7 miles upstream from mouth.

DRAINAGE AREA.--545 sq mi.

PERIOD OF RECORD.--January 1930 to current year. Prior to October 1951, published as "at Tomahawk".

GAGE.--Nonrecording gage and concrete dam, supplemented by frequent readings of tainter-gate openings. Datum of gage is 1,448.24 ft above mean sea level. Prior to October 1951, powerplant records at site 4.0 miles downstream.

AVERAGE DISCHARGE.--42 years, 536 cfs.

EXTREMES.--Current year: Maximum discharge, 1,030 cfs Jan. 15; minimum, 16 cfs Apr. 14.
Period of record: Maximum discharge, 2,690 cfs Oct. 2, 1959; no flow at times in 1931, 1932, 1934, 1940, 1957.

REMARKS.--Records good except those below 250 cfs, which are poor. Flow completely regulated by four reservoirs operated by Wisconsin Valley Improvement Company (see p. 130).

COOPERATION.--Record of lake elevations and gate openings furnished by Wisconsin Valley Improvement Company.

REVISIONS (WATER YEARS).--WSP 875: 1932, 1935, 1938. WSP 1278: 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	148	725	864	870	935	458	27	526	624	582	413
2	73	149	724	863	868	860	490	46	556	717	531	363
3	74	242	724	861	866	898	469	131	596	746	583	369
4	76	206	724	859	864	895	456	320	614	789	677	459
5	76	150	723	914	857	894	460	318	642	827	770	613
6	77	282	723	936	851	894	476	264	657	860	772	552
7	78	378	723	933	846	892	482	152	656	870	738	627
8	79	453	722	933	843	889	484	277	835	866	645	740
9	80	490	722	935	839	886	490	356	898	863	477	777
10	80	504	722	934	834	881	494	318	862	833	532	787
11	199	512	723	904	829	874	430	296	841	840	551	787
12	271	541	722	883	826	870	310	296	857	813	531	770
13	204	667	722	908	821	866	112	296	813	814	583	778
14	278	653	721	967	826	860	16	296	710	788	630	804
15	314	715	721	1,010	824	858	17	296	737	762	674	798
16	276	781	722	957	822	852	18	297	793	775	456	785
17	243	780	769	990	819	870	18	297	866	781	154	802
18	190	718	794	975	815	875	19	370	750	706	83	810
19	135	601	789	968	818	871	20	412	728	661	84	809
20	114	554	832	912	813	935	22	458	728	691	85	806
21	151	555	812	877	812	983	22	525	719	770	86	499
22	174	602	845	874	811	950	23	522	762	776	196	291
23	101	707	880	872	811	903	24	502	786	600	263	380
24	57	784	878	868	808	850	25	540	804	420	370	461
25	95	802	876	865	805	778	25	521	796	507	310	479
26	244	753	874	920	802	685	26	522	810	556	377	489
27	330	725	872	949	802	599	26	601	855	686	394	499
28	352	725	869	948	802	529	26	672	809	744	299	665
29	316	725	867	943	824	436	27	530	722	738	286	727
30	313	725	865	938	------	370	27	374	594	698	266	599
31	214	------	865	896	------	421	------	452	------	668	342	------
TOTAL	5,335	16,627	24,250	28,496	24,032	25,099	5,992	11,324	22,427	22,789	13,327	18,738
MEAN	172	554	782	919	829	810	200	365	748	735	430	625
MAX	352	802	880	1,010	870	990	494	672	898	870	772	810
MIN	57	148	721	859	802	370	16	27	526	420	83	291

CAL YR 1971 TOTAL 217,289 MEAN 595 MAX 952 MIN 53
WTR YR 1972 TOTAL 218,436 MEAN 597 MAX 1,010 MIN 16

05393500 Spirit River at Spirit Falls, Wis.

LOCATION.--Lat 45°26'58", long 89°58'47", in NW 1/4 sec.10, T.34 N., R.4 E., Lincoln County, near center of span on downstream side of bridge 0.2 mile south of Spirit Falls, 0.6 mile upstream from Squaw Creek, and 2.0 miles downstream from Richie Creek.

DRAINAGE AREA.--82 sq mi, approximately.

PERIOD OF RECORD.--April 1942 to current year.

GAGE.--Nonrecording gage and crest-stage gage. Altitude of gage is 1,450 ft (from dam and reservoir data).

AVERAGE DISCHARGE.--30 years, 82.3 cfs (13.63 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,750 cfs Apr. 18 (gage height, 6.52 ft); minimum discharge observed, 5.5 cfs July 7, 11.

Period of record: Maximum discharge, 4,180 cfs Sept. 18, 1942 (gage height, 10.00 ft), from rating curve extended above 2,500 cfs; minimum observed, 1.0 cfs Aug. 11, 1964 (gage height, 0.85 ft).

REMARKS.--Records good except those for winter months, which are fair.

REVISIONS (WATER YEARS).--WSP 1208: Drainage area. WSP 1308: 1943(M), 1948-50(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Oct. 1-27; stage-discharge relation affected by ice Oct. 28 to Apr. 9.)

1.0	2.2	2.0	52	4.0	470
1.2	6.2	2.5	122	5.0	830
1.4	12	3.0	220	6.0	1,370
1.6	21	3.5	335	7.0	2,130

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	64	52	32	23	21	88	260	16	14	20	80
2	162	80	50	32	23	21	84	360	14	9.1	18	58
3	136	110	50	31	23	21	82	405	13	7.8	17	52
4	93	66	50	31	23	21	78	308	12	7.0	16	35
5	59	58	52	31	23	21	78	232	1C	6.7	13	34
6	33	54	56	30	23	22	78	192	9.4	6.2	12	30
7	35	50	60	29	23	22	82	172	9.1	5.5	12	37
8	36	43	66	28	22	23	90	136	7.0	6.2	26	46
9	40	46	76	28	22	23	110	115	9.1	6.2	190	38
10	38	46	84	28	22	23	140	93	8.3	5.8	98	31
11	35	46	96	27	21	24	216	81	7.5	5.5	68	29
12	33	47	80	27	21	24	282	73	10	6.5	44	34
13	34	49	68	27	21	25	385	64	14	8.0	37	30
14	36	52	66	27	21	26	494	62	11	7.2	31	28
15	35	54	76	26	20	27	606	60	9.8	21	26	25
16	36	60	96	25	20	34	925	59	9.1	18	24	22
17	36	70	76	25	20	38	1,360	51	8.0	11	38	20
18	41	86	64	24	20	43	1,590	46	7.0	16	57	18
19	43	84	56	24	21	50	1,200	38	7.0	17	58	16
20	54	76	49	24	21	66	1,080	33	9.8	14	57	15
21	53	70	45	24	21	76	1,050	35	13	12	111	258
22	56	68	42	24	21	100	750	37	10	18	120	198
23	50	64	38	24	20	130	622	36	7.2	118	536	101
24	45	62	36	24	20	140	569	26	6.5	127	437	72
25	44	60	35	24	20	120	512	20	6.5	58	362	72
26	45	58	35	24	20	110	452	19	6.2	45	265	672
27	44	56	35	24	20	100	400	16	6.0	33	244	718
28	46	54	35	24	20	98	368	14	5.8	29	164	413
29	52	52	34	24	20	96	328	14	20	23	109	470
30	52	52	34	24	------	94	285	18	15	25	91	395
31	54	------	33	24	------	92	------	19	------	22	70	------
TOTAL	1,685	1,841	1,725	820	615	1,731	14,384	3,094	297.3	708.7	3,371	4,047
MEAN	54.4	61.4	55.6	26.5	21.2	55.8	479	99.8	9.91	22.9	109	135
MAX	162	110	96	32	23	140	1,590	405	20	127	536	718
MIN	33	46	33	24	20	21	78	14	5.8	5.5	12	15
CFSM	.66	.75	.68	.32	.26	.68	5.84	1.22	.12	.28	1.33	1.65
IN.	.76	.84	.78	.37	.28	.79	6.53	1.40	.13	.32	1.53	1.84

CAL YR 1971 TOTAL 34,014.2 MEAN 93.2 MAX 2,150 MIN 4.9 CFSM 1.14 IN 15.43
WTR YR 1972 TOTAL 34,319.0 MEAN 93.8 MAX 1,590 MIN 5.5 CFSM 1.14 IN 15.57

05394500 Prairie River near Merrill, Wis.

LOCATION.--Lat 45°14'09", long 89°38'59", on line between secs.20 and 29, T.32 N., R.7 E., Lincoln County, on left bank 40 ft upstream from County Highway C bridge, 1.5 miles upstream from Meadow Creek, 4.5 miles northeast of Merrill, and 8.0 miles upstream from mouth.

DRAINAGE AREA.--181 sq mi.

PERIOD OF RECORD.--January 1914 to September 1931, August 1939 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (from topographic map). Prior to Oct. 9, 1968, nonrecording gage 40 ft downstream at same datum.

AVERAGE DISCHARGE.--50 years (1914-31, 1939-72), 180 cfs (13.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,070 cfs Apr. 18 (gage height, 6.33 ft); minimum daily, 56 cfs July 5-10.

Period of record: Maximum discharge, 5,800 cfs Aug. 31, 1941 (gage height, 9.45 ft, from floodmarks), from rating curve extended above 2,200 cfs; minimum observed, 34 cfs Oct. 26, 1947 (gage height, 1.39 ft).

REMARKS.--Records good except those for winter months and those for period of no gage-height record, which are fair.

REVISIONS (WATER YEARS).--WSP 1308: 1915-17(M), 1919-21(M), 1923-31(M), 1942-43(M), 1945(M), 1948-50(M). WSP 1558: Drainage area.

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 10 to Apr. 9.)

2.0	74	4.0	643
2.3	122	5.0	1,110
3.0	298	6.4	2,120

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	180	110	94	82	74	140	579	133	68	100	180
2	180	227	113	90	82	74	140	566	112	64	110	160
3	266	258	110	88	82	76	130	533	101	60	98	140
4	314	232	109	86	82	78	130	465	92	58	86	130
5	297	201	111	86	82	78	130	394	87	56	78	130
6	239	172	112	86	82	80	130	339	90	56	72	130
7	195	138	111	86	82	82	130	293	82	56	72	120
8	169	138	113	86	82	82	130	255	76	56	120	110
9	159	132	115	86	82	86	130	224	74	56	180	100
10	147	122	130	86	80	90	135	204	72	56	210	92
11	137	119	150	84	80	92	159	183	72	60	160	98
12	130	119	180	84	80	94	211	166	78	72	130	110
13	131	117	190	82	80	98	299	157	90	82	120	100
14	131	116	170	80	78	100	369	163	110	88	110	94
15	127	117	150	80	78	100	524	196	96	94	100	88
16	121	120	120	86	78	100	852	178	90	82	96	84
17	118	119	160	88	78	100	1,500	152	82	80	140	82
18	119	135	210	88	76	100	1,990	136	78	78	280	80
19	123	164	390	86	76	100	1,700	127	74	86	500	80
20	145	169	210	88	76	110	1,480	118	80	80	680	84
21	163	155	150	88	76	120	1,370	116	72	76	500	110
22	180	123	130	88	76	130	1,300	114	68	80	400	160
23	172	131	110	86	76	150	1,060	107	64	94	300	140
24	157	123	100	86	76	160	914	100	62	140	360	130
25	141	123	90	88	78	170	814	94	60	130	480	250
26	132	124	84	86	76	160	747	89	58	120	640	540
27	134	115	80	86	76	160	708	86	58	100	900	1,200
28	136	122	76	84	76	150	687	88	60	98	600	1,100
29	127	121	90	84	76	150	660	107	68	92	400	1,300
30	129	113	92	84	------	150	620	152	80	90	300	820
31	157	------	100	84	------	140	------	158	------	88	230	------
TOTAL	5,026	4,345	4,166	2,664	2,284	3,434	19,289	6,639	2,419	2,496	8,552	7,942
MEAN	162	145	134	85.9	78.8	111	643	214	80.6	80.5	276	265
MAX	314	258	390	94	82	170	1,990	579	133	140	900	1,300
MIN	118	113	76	80	76	74	130	86	58	56	72	80
CFSM	.90	.80	.74	.47	.44	.61	3.55	1.18	.45	.44	1.52	1.46
IN.	1.03	.89	.86	.55	.47	.71	3.96	1.36	.50	.51	1.76	1.63

CAL YR 1971 TOTAL 62,368 MEAN 171 MAX 1,780 MIN 76 CFSM .94 IN 12.82
WTR YR 1972 TOTAL 69,256 MEAN 189 MAX 1,990 MIN 56 CFSM 1.04 IN 14.23

NOTE.--No gage-height record June 6 to Sept. 30.

05395000 Wisconsin River at Merrill, Wis.

LOCATION.--Lat 45°10'41", long 89°40'52", on line between secs.12 and 13, T.31 N., R.6 E., Lincoln County, on left bank 300 ft downstream from Highway 51 bridge at east end of Merrill, and 0.5 mile downstream from Prairie River.

DRAINAGE AREA.--2,780 sq mi, approximately.

PERIOD OF RECORD.--November 1902 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,228.85 [illegible] sea level. Prior to June 18, 1903, nonrecording gage at different datum. June 18, 1903, to S[illegible], 1914, nonrecording gage at present datum.

AVERAGE DISCHARGE.--69 years (1903-72), 2,679 cfs.

EXTREMES.--Current year: Maximum discharge, 16,300 cfs Apr. 18 (gage height, 11.04 ft); minimum, 1,170 cfs June 26 (gage height, 4.23 ft).

Period of record: Maximum discharge, 49,400 cfs Aug. 31, 1941 (gage height, 18.26 ft) from rating curve extended above 20,000 cfs; minimum, about 90 cfs Sept. 26, 1908 (gage height, 2.45 ft).

REMARKS.--Records good except those for winter months, which are fair. Flow regulated by 20 reservoirs (see p. 129) and 9 powerplants above station.

REVISIONS (WATER YEARS).--WSP 805: Drainage area. WSP 1308: 1904-7, 1909-11, 1913. WSP 1508: 1908, 1915-16 (M), 1917, 1920-21(M), 1925(M), 1930, 1935-36.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Aug. 3 to Sept. 25; stage-discharge relation affected by ice Dec. 1[illegible] to Apr. 7.)

4.0	980	7.0	5,630
4.5	1,510	9.0	9,900
5.0	2,130	11.0	16,200
6.0	3,690	12.0	19,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,390	2,650	2,650	2,400	2,000	2,200	2,500	4,660	1,930	1,870	2,190	3,160
2	2,610	2,770	2,270	2,400	2,000	2,200	2,400	4,660	2,190	1,820	2,080	2,940
3	3,320	2,770	2,410	2,400	2,000	2,200	2,400	4,940	2,130	1,910	2,000	2,230
4	3,270	2,850	2,640	2,300	2,000	2,200	2,400	4,330	2,030	1,720	1,800	2,310
5	2,840	2,640	2,680	2,300	2,000	2,100	2,600	4,780	1,980	1,860	1,850	2,470
6	2,860	2,160	2,530	2,200	1,900	2,100	2,400	3,900	2,150	2,060	2,160	2,720
7	2,240	2,000	2,480	2,300	1,900	2,100	2,200	3,330	1,920	2,030	2,180	2,680
8	2,610	2,320	2,450	2,400	1,900	2,100	2,170	3,000	2,020	1,840	2,530	1,870
9	2,340	2,240	2,670	2,500	1,800	2,000	2,440	3,370	2,320	1,880	2,700	2,190
10	2,320	2,160	2,700	2,600	1,800	2,000	2,970	3,190	2,080	1,950	2,560	2,230
11	2,020	2,170	2,900	2,600	1,800	2,000	2,430	2,750	1,920	2,020	2,270	2,230
12	1,990	2,210	2,700	2,600	1,800	2,100	3,240	2,410	2,250	2,160	2,200	2,330
13	2,200	2,350	2,600	2,600	1,800	2,100	3,840	2,500	2,290	2,060	2,140	2,470
14	2,320	2,190	2,500	2,500	1,900	2,100	4,770	2,150	2,280	2,170	2,040	2,260
15	2,140	2,220	2,600	2,400	2,000	2,200	6,060	2,720	2,240	2,430	1,950	2,380
16	2,090	2,440	2,700	2,400	2,000	2,200	8,470	2,560	1,730	2,120	1,580	2,080
17	2,120	2,660	2,800	2,400	1,900	2,200	11,800	2,490	1,970	2,190	4,130	2,230
18	1,940	2,760	2,700	2,300	1,900	2,200	15,800	2,430	2,070	2,410	4,670	2,040
19	1,950	2,900	2,800	2,400	1,900	2,100	14,900	2,150	2,080	2,350	5,110	2,130
20	2,220	2,540	2,700	2,500	2,000	2,100	11,800	1,940	2,200	2,100	4,690	2,420
21	2,260	2,700	2,600	2,500	2,100	2,300	11,100	2,370	2,260	2,190	4,470	3,020
22	2,360	2,380	2,700	2,400	2,100	2,800	10,300	2,170	2,080	2,470	4,140	2,460
23	2,230	2,240	2,600	2,300	2,100	2,700	9,300	1,890	2,110	2,810	3,870	2,620
24	2,180	2,810	2,600	2,200	2,100	2,700	8,030	2,590	1,930	2,710	4,090	2,240
25	2,110	2,650	2,700	2,200	2,100	2,600	7,140	1,860	1,870	2,520	4,790	2,760
26	2,100	2,650	2,600	2,200	2,200	2,500	6,610	1,910	1,840	2,060	4,830	8,330
27	2,270	2,680	2,600	2,200	2,200	2,500	6,010	2,070	2,160	2,020	4,950	9,700
28	2,[illegible]50	2,650	2,600	2,100	2,200	2,600	5,810	1,830	2,250	1,980	4,180	9,050
29	2,090	2,670	2,600	2,100	2,200	2,700	5,430	2,000	2,340	2,350	3,440	10,700
30	2,210	2,670	2,600	2,100	------	2,500	5,490	2,470	2,210	2,180	3,200	8,470
31	2,110	------	2,500	2,000	------	2,500	------	2,290	------	2,060	3,400	------
TOTAL	73,060	75,100	81,180	72,800	57,600	70,900	182,810	87,710	62,830	66,300	98,590	106,720
MEAN	2,357	2,503	2,619	2,348	1,986	2,287	6,094	2,829	2,094	2,139	3,180	3,557
MAX	3,390	2,900	2,900	2,600	2,200	2,800	15,800	4,940	2,340	2,810	5,110	10,700
MIN	1,940	2,000	2,270	2,000	1,800	2,000	2,170	1,830	1,730	1,720	1,800	1,870

CAL YR 1971 TOTAL 1,017,120 MEAN 2,787 MAX 16,600 MIN 1,720
WTR YR 1972 TOTAL 1,035,600 MEAN 2,830 MAX 15,800 MIN 1,720

05397500 Eau Claire River at Kelly, Wis.

LOCATION.--Lat 44°55'06", long 89°33'00", on line between secs.9 and 10, T.28 N., R.8 E., Marathon County, on right bank 50 ft downstream from County Highway SS bridge, 0.7 mile northeast of Kelly, 1.3 miles upstream from Big Sandy Creek, 4.5 miles upstream from mouth, and 5.0 miles southeast of Wausau.

DRAINAGE AREA.--326 sq mi.

PERIOD OF RECORD.--January 1914 to November 1926, August 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,177.88 ft above mean sea level. Prior to Sept. 17, 1953, non-recording gage at same site at datum 1.00 ft higher.

AVERAGE DISCHARGE.--45 years, 248 cfs (10.30 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,360 cfs Apr. 19 (gage height, 9.42 ft); minimum daily, 66 cfs Feb. 18-21.

Period of record: Maximum discharge, 8,300 cfs Aug. 21, 1926 (gage height, 8.4 ft from graph based on gage readings), from rating curve extended above 6,000 cfs; minimum observed, 8 cfs July 17, 1944 (gage height, 0.17 ft), probably result of temporary regulation.

REMARKS.--Records good except those for winter months, which are fair.

REVISIONS (WATER YEARS).--WSP 1508: 1915, 1916-17(M), 1919-26(M), 1940(M), 1945(M), 1950(M).

Rating tables (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Apr. 9-16; stage-discharge relation affected by ice Nov. 8-14, 18-22, Nov. 24 to Apr. 9.)

Oct. 1 to Mar. 31		Apr. 1 to Sept. 30			
1.0	52	1.0	40	4.0	1,390
1.7	207	1.5	157	5.0	2,140
2.5	515	2.0	325	7.0	3,820
3.6	1,070	3.0	780	9.0	5,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	341	289	210	190	78	70	260	657	141	90	183	260
2	328	508	210	190	76	72	240	722	130	83	197	225
3	779	571	220	180	76	76	230	699	122	80	156	196
4	930	508	240	180	74	80	240	612	114	76	136	175
5	862	420	250	170	72	84	220	513	107	73	120	178
6	597	337	270	160	72	90	200	442	104	74	102	171
7	397	262	280	160	72	100	190	354	104	78	101	159
8	314	180	310	150	72	110	170	352	98	76	141	150
9	274	170	340	150	72	130	170	313	100	76	298	139
10	246	170	400	140	70	150	172	283	104	76	355	129
11	213	160	600	140	70	160	260	255	95	84	267	135
12	188	160	800	130	70	170	402	236	105	114	210	149
13	182	150	720	130	70	180	571	224	124	126	163	144
14	179	150	540	120	70	190	788	223	139	131	132	135
15	171	155	580	120	70	200	1,380	246	132	147	116	126
16	157	153	680	120	68	210	2,500	225	122	136	109	120
17	147	155	800	110	68	230	3,450	207	111	116	279	118
18	141	180	450	110	66	240	4,730	195	102	113	730	125
19	168	240	360	110	66	270	5,780	174	95	125	1,220	118
20	261	210	300	110	66	320	4,260	167	98	117	1,070	120
21	287	190	270	100	66	400	3,160	160	97	103	825	226
22	285	170	250	100	68	450	2,470	153	97	99	579	248
23	265	169	240	98	70	480	1,980	145	88	114	448	206
24	236	190	230	96	70	450	1,630	136	85	112	631	175
25	214	250	220	92	70	420	1,450	128	83	112	953	286
26	198	330	220	90	70	380	1,250	124	81	104	1,170	1,730
27	190	250	210	86	70	360	1,050	118	79	96	1,900	2,120
28	200	230	210	84	68	340	872	114	82	87	1,180	2,100
29	196	220	200	84	68	310	768	132	92	91	693	2,790
30	187	210	200	82	------	290	691	156	99	126	427	1,980
31	271	------	190	80	------	270	------	158	------	120	319	------
TOTAL	9,404	7,337	11,000	3,862	2,038	7,282	41,534	8,663	3,130	3,155	15,210	14,933
MEAN	303	245	355	125	70.3	235	1,384	279	104	102	491	498
MAX	930	571	800	190	78	480	5,780	722	141	147	1,900	2,790
MIN	141	150	190	80	66	70	170	114	79	73	101	118
CFSM	.93	.75	1.09	.38	.22	.72	4.25	.86	.32	.31	1.51	1.53
IN.	1.07	.84	1.26	.44	.23	.83	4.74	.99	.36	.36	1.74	1.70

CAL YR 1971 TOTAL 97,483 MEAN 267 MAX 4,450 MIN 61 CFSM .82 IN 11.12
WTR YR 1972 TOTAL 127,548 MEAN 348 MAX 5,780 MIN 66 CFSM 1.07 IN 14.55

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	1200	9.42	6,360	9-29	0300	6.55	3,420
8-27	1000	4.95	2,070				

05398000 Wisconsin River at Rothschild, Wis.

LOCATION.--Lat 44°53'09", long 89°38'05", in sec.26, T.28 N., R.7 E., Marathon County, on left bank at Rothschild, 0.5 mile downstream from Rothschild Dam, 1.7 miles north of bridge on U.S. Highway 51, 2.0 miles downstream from Eau Claire River, and 5.0 miles upstream from Black Creek.

DRAINAGE AREA.--4,000 sq mi, approximately.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,135.86 ft above mean sea level. Auxiliary water-stage recorder in Mosinee Pond 8 miles downstream. Prior to July 23, 1964, nonrecording auxiliary gage at same site and datum, read hourly.

AVERAGE DISCHARGE.--28 years, 3,367 cfs.

EXTREMES.--Current year: Maximum discharge, 40,500 cfs Apr. 18 (gage height, 16.66 ft); minimum daily, 1,780 cfs July 6.

Period of record: Maximum discharge, 49,200 cfs Apr. 12, 1965, Mar. 31, 1967 (gage height, 18.46 ft); minimum daily, 680 cfs Oct. 17, 1948.

Flood of Sept. 1, 1941, reached stage of 22.3 ft from tailwater data at Rothschild Dam (discharge 75,000 cfs from rating curve extended above 45,000 cfs by logarithmic plotting).

REMARKS.--Records good except those for winter months, or discharge below 1,500 cfs, which are fair. Flow regulated by 20 reservoirs (see p. 129) and 12 powerplants above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,310	3,690	3,190	3,000	3,100	2,600	4,400	7,000	2,490	2,250	3,270	4,520
2	7,460	5,740	2,950	3,000	2,800	2,700	3,700	7,400	2,390	1,880	3,340	4,520
3	8,300	5,760	2,830	3,200	2,700	2,600	3,400	7,520	2,410	2,020	2,250	2,650
4	7,720	4,860	2,770	3,200	2,900	2,700	3,700	6,490	2,680	2,010	2,410	2,820
5	5,360	4,430	3,170	3,000	2,600	2,400	3,400	6,930	2,580	1,990	2,280	2,920
6	5,190	3,820	3,190	2,900	2,500	2,600	3,500	6,040	2,380	1,780	2,190	3,480
7	3,870	2,670	3,180	3,000	2,700	2,600	3,200	5,400	2,370	2,460	2,730	3,320
8	3,500	2,950	3,190	2,900	2,600	2,600	3,200	4,270	2,310	1,910	3,040	3,200
9	3,420	3,150	3,180	2,900	2,600	2,700	3,300	4,780	2,220	2,220	4,280	2,540
10	3,420	2,940	4,310	3,100	2,700	2,900	4,310	4,350	2,640	2,100	3,970	2,660
11	2,810	2,900	6,330	3,200	2,700	2,700	5,050	3,960	2,420	2,400	3,050	2,950
12	2,910	2,900	6,260	3,300	2,700	2,500	7,180	3,300	2,210	2,890	2,740	3,040
13	3,070	2,640	4,500	3,200	2,400	2,900	9,590	3,560	2,770	2,610	2,720	3,060
14	3,020	2,620	3,700	3,000	2,800	3,000	12,500	2,970	2,810	3,110	2,650	3,150
15	3,210	2,760	4,200	2,700	2,600	2,900	15,700	3,560	2,690	3,520	2,260	3,080
16	2,570	2,910	5,000	2,800	2,600	3,000	25,300	3,110	2,310	3,450	2,280	2,670
17	2,250	3,000	5,600	2,700	2,800	3,100	34,200	3,610	2,020	2,530	3,750	2,450
18	2,650	3,250	3,300	3,100	2,700	3,100	40,000	3,280	2,240	3,010	6,600	2,970
19	2,850	3,380	3,600	2,800	2,200	3,000	37,000	2,760	2,360	3,250	6,970	2,920
20	3,070	3,830	3,400	2,300	2,200	2,900	32,000	2,540	2,390	2,680	7,410	3,230
21	3,440	3,250	3,500	3,000	2,800	3,500	28,000	2,850	2,330	2,600	7,450	4,980
22	3,550	3,180	3,400	2,900	2,900	4,400	22,000	2,910	2,400	2,970	6,220	4,510
23	3,620	2,970	3,500	2,800	2,700	4,800	18,000	2,610	2,240	3,010	5,910	4,060
24	2,990	3,000	3,600	2,900	2,600	5,400	15,000	2,940	2,110	3,250	6,010	3,300
25	3,030	3,140	3,500	2,800	2,700	6,200	12,000	2,420	1,920	3,280	7,220	4,390
26	2,990	3,120	3,500	2,800	2,600	5,400	10,000	2,340	1,960	2,720	7,520	20,800
27	2,930	3,130	3,300	2,700	2,800	5,200	9,000	2,450	2,030	2,200	10,300	27,200
28	3,140	3,140	3,000	2,700	3,000	5,000	8,200	2,400	2,500	2,420	8,010	17,200
29	3,200	3,120	3,000	2,600	2,900	4,800	7,600	2,320	2,350	2,190	6,030	24,300
30	2,790	3,150	3,100	2,400	------	4,500	7,800	3,310	2,690	2,510	4,870	17,300
31	3,200	------	3,100	2,800	------	4,000	------	2,620	------	2,780	4,470	------
TOTAL	117,840	101,400	114,350	89,700	77,900	108,700	392,230	122,000	71,220	80,000	144,200	190,190
MEAN	3,801	3,380	3,689	2,894	2,686	3,506	13,070	3,935	2,374	2,581	4,652	6,340
MAX	8,300	5,760	6,330	3,300	3,100	6,200	40,000	7,520	2,810	3,520	10,300	27,200
MIN	2,250	2,620	2,770	2,300	2,200	2,400	3,200	2,320	1,920	1,780	2,190	2,450

CAL YR 1971 TOTAL 1,433,610 MEAN 3,928 MAX 35,800 MIN 1,680
WTR YR 1972 TOTAL 1,609,730 MEAN 4,398 MAX 40,000 MIN 1,780

05399500 Big Eau Pleine River near Stratford, Wis.

LOCATION.--Lat 44°49'19", long 90°04'46", on line between sec.13, T.27 N., R.3 E., and sec.18, T.27 N., R.4 E., Marathon County, on left bank 15 ft upstream from bridge on State Highway 97, 1.0 mile north of Stratford, and 1.4 miles downstream from small tributary.

DRAINAGE AREA.--224 sq mi.

PERIOD OF RECORD.--July 1914 to December 1925, Apr. 1937 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 1,154.24 ft above mean sea level. July 24, 1914, to Dec. 31, 1925, nonrecording gage at site 0.5 mile upstream at different datum. Apr. 30, 1937, to Sept. 15, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--46 years (1914-25, 1937-72), 171 cfs (10.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 14,600 cfs Sept. 26 (gage height, 18.91 ft); minimum, 4.9 cfs June 28 (gage height, 2.45 ft).

Period of record: Maximum discharge, 41,000 cfs Sept. 9, 1938 (gage height, 24.5 ft, from floodmarks), from rating curve extended above 24,000 cfs; no flow Aug. 17, 1947, Jan. 22 to Feb. 5, 1961.

Flood of June 5, 1914, reached a stage of 20.7 ft, from floodmarks (discharge, 40,000 cfs), former site and datum.

REMARKS.--Records good except those for winter months and those for periods of no gage-height record, which are fair.

REVISIONS (WATER YEARS).--WSP 1308: 1917, 1920-22, 1926, 1946, 1948, 1950. WSP 1508: 1915-25(M), 1937, 1946(M), 1948(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Aug. 9 to Sept. 18; rate of change in stage used as a factor Apr. 14-20; stage-discharge relation affected by ice Nov. 26 to Apr. 13.)

2.3	1.5	4.0	175	10.0	2,690
2.6	12	5.0	410	12.0	4,400
3.0	38	6.0	690	14.0	6,540
3.5	88	8.0	1,500	16.0	9,450

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309	209	42	40	16	17	350	227	14	7.0	40	46
2	1,150	461	42	38	16	18	330	421	13	6.2	110	34
3	439	358	43	37	15	18	320	273	12	6.2	78	26
4	207	209	44	36	15	19	310	155	10	8.0	52	21
5	125	142	46	34	15	19	300	104	9.6	9.2	34	23
6	82	99	50	33	15	20	290	83	8.8	8.2	28	23
7	60	72	56	32	15	21	340	70	8.0	8.4	24	20
8	50	54	64	31	15	21	420	59	7.2	7.6	110	20
9	43	46	74	30	15	22	520	50	6.8	8.0	540	19
10	38	43	120	29	15	23	600	44	5.8	8.4	324	18
11	34	41	370	28	15	23	1,400	38	5.3	12	184	16
12	34	40	280	27	15	24	2,000	34	7.0	16	99	15
13	33	40	230	26	15	26	2,700	33	8.5	14	56	15
14	31	39	200	25	15	27	3,660	41	11	25	44	14
15	30	38	220	24	15	28	5,120	49	11	50	270	12
16	28	39	340	23	15	31	6,640	59	9.7	76	91	12
17	25	44	270	22	15	34	5,630	57	8.1	120	44	23
18	24	56	210	21	15	37	2,950	38	7.1	86	29	37
19	28	73	170	21	15	46	3,480	28	6.5	56	26	24
20	39	79	140	20	16	62	1,290	26	6.9	60	77	20
21	52	74	110	19	16	90	700	22	7.5	45	145	17
22	59	65	92	19	16	200	954	29	7.6	31	135	16
23	50	47	80	18	16	400	1,130	20	6.8	28	89	39
24	42	42	66	18	16	460	643	17	5.9	25	72	30
25	38	36	60	17	17	520	400	15	5.6	50	68	24
26	37	38	56	17	17	470	269	13	5.4	62	442	9,300
27	39	37	54	17	17	440	197	12	5.0	45	876	2,400
28	42	37	50	17	17	400	151	13	4.9	32	501	1,800
29	42	40	47	16	17	390	118	20	5.6	23	235	2,000
30	54	41	45	16	------	370	98	22	7.4	19	120	1,200
31	244	------	42	16	------	360	------	16	------	17	67	------
TOTAL	3,508	2,639	3,713	767	452	4,636	43,310	2,088	238.0	969.2	5,010	17,264
MEAN	113	88.0	120	24.7	15.6	150	1,444	67.4	7.93	31.3	162	575
MAX	1,150	461	370	40	17	520	6,640	421	14	120	876	9,300
MIN	24	36	42	16	15	17	98	12	4.9	6.2	24	12
CFSM	.50	.39	.54	.11	.07	.67	6.45	.30	.04	.14	.72	2.57
IN.	.58	.44	.62	.13	.08	.77	7.19	.35	.04	.16	.83	2.87

CAL YR 1971	TOTAL 61,934.0	MEAN 170	MAX 7,200	MIN 4.4	CFSM .76	IN 10.29
WTR YR 1972	TOTAL 84,594.2	MEAN 231	MAX 9,300	MIN 4.9	CFSM 1.03	IN 14.05

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-16	2400	15.14	8,110	9-26	0645	18.91	14,600

NOTE.--No gage-height record June 27 to Aug. 9, Sept.19-24, 28-30.

05400600 Little Plover River near Arnott, Wis.

LOCATION.--Lat 44°28'05", long 89°29'20", in NE 1/4 sec. 14, T.23 N., R.8 E., Portage County, 150 ft below bridge on town road 2.2 miles northwest of Arnott and 3.5 miles upstream from mouth.

DRAINAGE AREA.--1.5 sq mi, approximately, of which a portion is noncontributing.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 1,087.37 ft above mean sea level (levels by Wisconsin Department of Natural Resources). Prior to April 1960, nonrecording gage at same site and datum 0.26 ft higher.

AVERAGE DISCHARGE.--13 years, 3.46 cfs.

EXTREMES.--Current year: Maximum discharge, 42 cfs Sept. 26 (gage height, 2.60 ft); minimum, 1.8 cfs Mar. 1 (gage height, 0.66 ft).

Period of record: Maximum discharge, 66 cfs Sept. 13, 1962 (gage height, 3.43 ft); minimum, 0.8 cfs for many days in July, August, and September 1959.

REMARKS.--Records good except those for period of no gage-height record, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used June 20.)

0.7	2.3	1.6	8.4
1.0	4.0	2.0	19
1.3	6.0	2.7	46

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	4.3	3.4	3.4	2.8	2.8	3.2	6.2	4.8	3.8	3.6	5.6
2	3.6	7.5	3.5	3.4	2.9	2.8	3.2	6.7	4.6	3.5	3.8	5.4
3	4.7	4.8	3.6	3.1	2.8	2.7	3.2	6.3	4.4	3.3	3.5	5.4
4	3.9	4.9	3.5	3.0	2.8	2.6	3.1	5.7	4.2	3.2	3.3	5.0
5	3.7	4.5	3.6	3.0	2.8	2.8	3.2	5.5	4.4	3.1	3.2	5.0
6	3.6	4.0	3.7	3.1	2.8	2.8	3.3	5.6	4.2	3.1	4.0	5.4
7	3.4	3.8	3.7	3.2	2.7	2.6	3.2	5.2	4.1	3.0	4.5	5.0
8	3.5	3.8	3.8	3.3	2.7	2.6	3.2	5.2	4.1	3.4	4.0	4.7
9	3.6	3.7	4.0	3.3	2.7	2.5	3.4	5.1	3.9	3.2	3.8	4.7
10	3.5	3.6	5.5	3.3	2.7	2.5	6.9	4.9	3.6	3.2	3.7	4.7
11	3.4	3.6	5.2	3.2	2.8	2.8	8.4	4.9	3.7	3.4	3.7	4.9
12	3.4	3.6	4.5	3.1	2.9	2.6	8.0	4.9	4.3	3.3	3.6	5.6
13	3.4	3.6	4.0	3.0	2.9	2.6	11	5.1	4.0	3.3	3.5	6.4
14	3.3	3.6	4.1	3.1	2.9	2.7	8.8	5.8	4.6	3.4	3.5	5.0
15	3.2	3.5	6.0	3.1	2.7	2.7	11	6.0	4.0	3.3	3.5	5.0
16	3.2	3.7	5.3	3.1	2.7	2.8	13	5.4	3.7	3.4	3.3	5.0
17	3.2	3.8	4.3	3.1	2.9	2.8	13	5.1	3.7	3.5	3.3	5.2
18	3.2	4.3	3.9	3.0	2.8	2.7	13	4.9	3.7	3.5	3.6	7.0
19	3.9	4.0	4.2	3.0	2.6	2.7	13	4.7	3.7	3.2	5.0	5.9
20	3.6	4.0	4.0	3.0	2.7	3.4	9.1	5.0	3.6	3.3	4.3	5.7
21	3.5	3.6	3.7	3.0	2.8	4.5	7.6	5.3	3.4	3.1	3.9	5.4
22	3.5	3.5	3.6	3.2	2.6	5.0	13	5.2	3.3	3.0	5.2	5.1
23	3.5	3.5	3.8	3.0	2.8	4.3	10	5.0	3.3	3.0	6.6	5.1
24	3.3	3.6	3.7	3.0	2.8	3.9	7.6	4.9	3.3	2.9	9.0	5.1
25	3.3	3.5	3.7	2.9	2.7	4.0	6.6	4.8	3.3	2.9	6.0	22
26	3.3	3.8	3.7	2.8	2.6	4.1	6.4	4.6	3.2	3.1	10	28
27	3.5	3.7	3.6	2.8	2.7	3.7	6.1	4.6	3.2	3.2	7.0	12
28	3.2	3.6	3.4	2.8	2.8	3.8	5.9	4.9	3.3	3.0	6.0	13
29	3.2	3.7	3.4	2.8	2.7	3.9	5.8	5.5	3.4	3.0	5.8	14
30	3.6	3.5	3.6	2.9	------	3.5	6.1	5.1	3.6	3.0	5.4	9.5
31	3.6	------	3.4	2.8	------	3.3	------	4.8	------	3.1	5.8	------
TOTAL	108.5	118.6	123.4	94.8	80.1	98.5	219.3	162.9	114.6	99.7	145.4	225.8
MEAN	3.50	3.95	3.98	3.06	2.76	3.18	7.31	5.25	3.82	3.22	4.69	7.53
MAX	4.7	7.5	6.0	3.4	2.9	5.0	13	6.7	4.8	3.8	10	28
MIN	3.2	3.5	3.4	2.8	2.6	2.5	3.1	4.6	3.2	2.9	3.2	4.7

CAL YR 1971 TOTAL 1,453.8 MEAN 3.98 MAX 14 MIN 2.9
WTR YR 1972 TOTAL 1,591.6 MEAN 4.35 MAX 28 MIN 2.5

NOTE.--No gage-height record June 21 to Sept. 14.

05400650 Little Plover River at Plover, Wis.

LOCATION.--Lat 44°28'26", long 89°31'44", in SW 1/4 sec.14, T.23 N., R.8 E., Portage County, on right bank at bridge on town road, 1.0 mile northeast of Plover and 1.2 miles upstream from mouth.

DRAINAGE AREA.--15 sq mi, approximately, of which a large portion is noncontributing.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 1,068.34 ft above mean sea level (levels by Wisconsin Department of Natural Resources). Prior to May 1960, nonrecording gage at same site and datum 0.88 ft lower.

AVERAGE DISCHARGE.--13 years, 9.93 cfs.

EXTREMES.--Current year: Maximum daily discharge, 60 cfs Sept. 26; minimum, 6.1 cfs Mar. 1 (gage height, 0.73 ft).

Period of record: Maximum discharge, 79 cfs Feb. 9, 1966 (gage height, 2.95 ft); minimum, 2.4 cfs May 23, 1965 (gage height, 0.41 ft), result of temporary dam at flume entrance; minimum daily, 4.3 cfs Aug. 19, 20, 1959.

REMARKS.--Records good except those for period of no gage-height record, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second).

0.7	5.7	2.0	29
1.0	10	2.5	44
1.5	19	3.0	84

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	10	9.7	10	8.2	7.7	9.7	16	11	10	9.6	15
2	9.2	15	10	10	8.4	8.8	9.6	16	11	9.0	9.7	14
3	11	12	10	9.4	8.5	8.4	9.4	16	11	8.8	8.8	14
4	9.8	12	10	9.2	7.9	8.2	9.2	15	11	8.2	8.5	13
5	9.6	12	10	9.2	8.1	8.1	9.2	14	11	8.2	8.4	13
6	9.4	11	10	9.6	8.2	8.1	9.6	14	11	8.2	9.7	14
7	9.2	11	10	9.8	7.8	8.4	9.4	14	10	7.9	12	13
8	9.2	11	10	9.8	7.7	7.8	9.1	14	10	8.9	11	12
9	9.2	11	11	10	7.5	8.1	9.7	14	10	8.5	10	12
10	9.4	11	14	9.8	7.5	7.9	13	14	9.8	8.5	9.7	12
11	9.2	11	13	9.6	7.7	8.8	18	14	10	9.0	9.7	12
12	9.2	11	12	9.4	7.8	8.4	17	14	11	8.6	9.4	13
13	9.4	11	11	8.8	8.1	8.2	21	14	10	8.8	9.1	17
14	9.2	11	11	9.0	8.5	8.4	17	15	11	8.6	9.1	13
15	9.1	11	14	9.0	8.5	8.5	19	16	10	8.8	9.1	12
16	9.1	11	14	9.0	7.9	8.6	21	14	9.8	8.8	9.0	12
17	9.1	11	11	9.0	8.5	8.5	21	14	9.8	8.8	8.6	12
18	9.1	11	11	9.2	8.5	8.5	21	13	9.8	9.1	9.0	16
19	10	11	12	8.6	7.9	8.5	22	13	9.8	8.5	13	14
20	10	11	11	8.8	8.1	9.2	19	13	10	8.6	11	14
21	9.8	11	11	8.8	8.5	11	18	12	9.1	8.2	10	13
22	9.7	10	11	9.2	7.9	13	21	12	8.8	7.8	12	13
23	9.7	10	11	8.2	8.4	11	20	12	8.6	7.9	16	12
24	9.6	10	11	8.4	8.5	11	18	12	8.6	7.5	18	12
25	9.6	10	11	7.9	8.2	11	17	11	8.6	7.5	15	30
26	9.6	10	11	8.2	8.1	11	16	11	8.6	8.2	26	60
27	9.7	10	11	8.2	8.4	10	16	11	8.5	8.2	21	28
28	9.6	10	10	8.2	8.5	10	16	11	8.6	7.9	16	30
29	9.4	10	10	8.4	8.5	11	15	12	8.8	7.8	15	33
30	9.7	10	10	8.4	------	11	15	12	9.0	7.9	14	27
31	10	------	10	8.4	------	9.8	------	11	------	7.7	15	------
TOTAL	295.2	327	341.7	279.5	236.3	286.9	465.9	414	294.2	260.4	372.4	525
MEAN	9.52	10.9	11.0	9.02	8.15	9.25	15.5	13.4	9.81	8.40	12.0	17.5
MAX	11	15	14	10	8.5	13	22	16	11	10	26	60
MIN	9.1	10	9.7	7.9	7.5	7.7	9.1	11	8.5	7.5	8.4	12

CAL YR 1971 TOTAL 3,902.7 MEAN 10.7 MAX 21 MIN 7.9
WTR YR 1972 TOTAL 4,098.5 MEAN 11.2 MAX 60 MIN 7.5

PEAK DISCHARGE (BASE, 22 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-10	2400	1.79	25	4-22	2100	1.66	22
4-13	0400	1.76	24	8-23	0200	1.72	23
4-17	0200	1.72	23	8-26	1700	2.32	38
4-19	1200	1.71	23	9-26	-	-	60

NOTE.--No gage-height record Sept. 24-30.

05400800 Wisconsin River at Wisconsin Rapids, Wis.

LOCATION.--Lat 44°22'05", long 89°51'30", in SW 1/4 sec.24, T.22 N., R.5 E., Wood County, at Centralia powerplant of Nekoosa-Edwards Paper, Inc., 1.6 miles downstream from Chicago and Northwestern Railway bridge in Wisconsin Rapids.

DRAINAGE AREA.--5,400 sq mi, approximately.

PERIOD OF RECORD.--May 1914 to March 1950 (published as "near Nekoosa"), October 1957 to current year.

GAGE.--Water-stage recorders on headwater and tailwater. Elevation of powerplant pond is 980 ft and datum of powerplant gages is 887.83 ft above mean sea level (levels by Wisconsin Valley Improvement Co.). May 1914 to March 1950, at site 7.0 miles downstream at different datum.

AVERAGE DISCHARGE.--50 years (1914-49, 1957-72), 4,906 cfs.

EXTREMES.--Current year: Maximum discharge, 44,100 cfs Apr. 20; minimum daily, 1,000 cfs Sept. 3.
Period of record: Maximum discharge, 70,400 cfs Sept. 12, 1938 (gage height, 19.10 ft), from rating curve extended above 58,000 cfs; minimum, 26 cfs Sept. 7, 1942; minimum daily, 165 cfs Aug. 12, 1934.

REMARKS.--Records good. Discharge computed from powerplant records on basis of load-discharge rating of hydroelectric units as developed by Geological Survey and tainter-gate ratings and spillway ratings based on theoretical formulas and discharge measurements. Flow regulated by 21 reservoirs (see p. 129) and many powerplants above station. Water diverted periodically from pond of Wisconsin Rapids powerplant 2.6 miles upstream into Cranberry Creek, a tributary of Yellow River, for cranberry culture. Probably most of the water diverted is lost by evaporation and transpiration. These diversions in cubic feet per second, for water year October 1971 to September 1972, were as follows:

June 12	100	June 20	100	July 7	100	Aug. 14	100
June 13	100	June 21	100	July 8	100	Aug. 15	13
June 14	100	June 22	16	July 9	16	Aug. 19	61
June 15	100	June 28	97	Aug. 9	58	Aug. 20	100
June 16	100	June 29	100	Aug. 10	100	Aug. 21	100
June 17	100	June 30	45	Aug. 11	100	Aug. 22	100
June 18	100	July 5	100	Aug. 12	100	Aug. 23	100
June 19	100	July 6	100	Aug. 13	100	Aug. 24	100
						Aug. 25	100

REVISIONS (WATER YEARS).--WSP 1308 1915(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,040	4,180	3,950	4,170	3,960	3,770	7,220	13,200	3,150	2,930	3,310	5,610
2	9,010	7,440	4,240	4,120	4,160	3,680	6,730	13,500	3,210	2,360	3,440	4,950
3	9,420	8,360	4,170	4,090	3,740	3,520	6,[illegible]0	11,800	3,190	1,580	3,230	1,000
4	8,820	6,570	3,790	4,050	3,700	3,470	5,260	11,200	2,560	1,480	2,940	2,690
5	7,470	4,900	3,310	4,090	3,820	2,720	5,380	9,660	3,210	2,820	2,750	4,370
6	5,620	4,510	3,900	4,050	3,690	3,360	5,400	8,380	3,180	2,990	2,780	4,520
7	4,040	4,530	4,130	4,040	3,850	3,420	5,330	6,340	3,260	2,940	3,100	3,600
8	3,750	4,180	4,150	3,950	3,900	3,500	5,460	5,390	3,190	2,800	3,430	3,600
9	3,660	4,180	4,030	3,730	3,890	3,260	5,340	5,230	3,340	2,240	3,680	3,650
10	4,240	3,970	5,060	3,980	4,080	3,280	5,590	5,640	3,080	2,750	4,060	2,550
11	3,890	4,160	7,540	4,150	3,870	3,250	8,430	5,700	2,550	3,110	4,090	3,610
12	3,390	4,120	9,130	4,290	3,540	2,960	12,300	5,220	3,170	3,770	3,270	3,580
13	3,360	3,690	6,350	4,240	3,320	3,410	16,600	4,580	3,330	3,220	2,520	3,860
14	3,440	3,400	5,480	4,030	3,840	3,700	18,800	3,730	3,400	3,180	2,810	3,600
15	3,620	3,560	6,900	4,210	3,720	4,150	21,900	4,350	3,240	3,090	3,260	3,500
16	3,440	4,020	8,690	3,950	3,760	4,100	30,600	4,790	3,190	2,520	3,310	3,420
17	2,800	4,050	7,220	4,090	3,670	4,050	37,800	4,710	3,020	3,750	3,550	2,780
18	3,320	4,050	5,520	4,100	3,680	4,070	39,600	4,560	2,510	3,780	5,600	3,640
19	3,910	4,320	5,270	4,140	3,440	4,130	42,400	5,030	2,990	3,370	8,260	4,300
20	3,880	4,340	5,600	4,120	3,360	4,360	44,100	4,090	3,130	3,410	8,210	4,390
21	3,800	4,020	5,890	4,130	3,570	4,370	36,600	2,720	3,140	3,100	9,410	5,030
22	4,310	4,010	5,360	4,080	3,580	5,280	29,000	3,770	3,080	2,830	8,640	5,240
23	4,140	4,120	4,880	4,060	3,440	5,590	26,100	3,870	3,090	2,310	6,220	4,720
24	3,730	4,120	4,000	4,180	3,390	7,010	22,700	3,740	3,000	3,290	7,160	4,650
25	3,670	4,080	4,340	4,090	3,610	8,500	19,000	3,530	2,370	3,530	7,750	6,290
26	3,840	4,240	5,150	4,130	3,380	9,740	16,300	3,030	2,940	3,490	9,630	18,200
27	3,640	4,160	5,110	4,080	3,300	9,680	15,200	2,720	2,590	3,380	10,200	34,200
28	3,710	3,850	4,860	4,080	3,400	8,870	10,600	2,650	2,710	3,370	11,900	31,600
29	3,890	3,970	4,310	3,950	3,540	8,550	12,000	2,580	3,080	3,160	9,190	30,700
30	4,060	3,960	4,160	3,500	------	7,780	12,500	3,130	3,030	2,580	7,010	31,700
31	3,600	------	4,330	4,040	------	7,380	------	3,000	------	3,230	6,070	------
TOTAL	141,510	133,060	160,720	125,910	106,200	154,910	530,620	171,840	90,930	92,360	170,780	245,550
MEAN	4,565	4,435	5,185	4,062	3,662	4,997	17,690	5,543	3,031	2,979	5,509	8,185
MAX	9,420	8,360	9,130	4,290	4,160	9,740	44,100	13,500	3,400	3,780	11,900	34,200
MIN	2,800	3,400	3,310	3,500	3,300	2,720	5,260	2,580	2,370	1,480	2,520	1,000

CAL YR 1971 TOTAL 1,959,050 MEAN 5,367 MAX 42,700 MIN 1,520
WTR YR 1972 TOTAL 2,124,390 MEAN 5,804 MAX 44,100 MIN 1,000

05401020 Tenmile Creek ditch 5 near Bancroft, Wis.

LOCATION.--Lat 44°18'08", long 89°32'59", in NE 1/4 sec.16, T.21 N., R.8 E., Portage County, at bridge on country road, 1.2 miles west of U.S. Highway 51 and 1.8 miles southwest of Bancroft.

DRAINAGE AREA.--8.8 sq mi, approximately.

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder and 90° V-notch sharp-crested weir in one bay of dam and broad-crested weir in other bay. Datum of gage is 1,063.57 ft above mean sea level (levels by Wisconsin Works Progress Administration).

AVERAGE DISCHARGE.--8 years, 7.42 cfs.

EXTREMES.--Current year: Maximum discharge, 42 cfs Sept. 26 (gage height, 2.80 ft); minimum daily, 3.4 cfs Aug. 4, 5.

Period of record: Maximum discharge, 202 cfs May 27, 1969 (gage height, 4.53 ft); minimum, 2.1 cfs Jan. 18, 1967 (gage height, 0.81 ft); minimum daily, 2.2 cfs Aug. 11, 13, 14, 17-19, 1967, Aug. 27, 1970.

REMARKS.--Records good, except when stop logs are moved, which are fair. There is approximately 2 miles of dredged drainage ditching above this gage. Sprinkler irrigation from ground-water wells is quite extensive in the basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	7.2	7.2	7.9	5.6	5.2	9.1	11	6.5	5.6	3.6	8.1
2	6.0	14	7.1	7.7	5.7	5.5	8.8	11	6.4	6.8	4.0	7.5
3	6.7	11	7.0	7.3	5.8	5.3	8.8	11	6.3	6.0	3.7	7.3
4	6.4	10	7.1	7.1	5.6	5.3	8.5	10	6.1	5.9	3.4	7.1
5	6.4	9.7	7.1	6.8	5.6	5.2	8.6	9.8	6.1	5.6	3.4	7.0
6	6.4	9.0	7.2	7.2	5.7	5.2	9.5	9.7	6.1	5.5	3.7	8.0
7	6.3	8.7	7.4	7.1	5.3	5.3	9.3	9.3	6.0	6.0	4.3	7.3
8	6.3	8.5	7.9	7.2	5.1	5.1	8.8	9.0	6.0	5.7	4.2	6.8
9	6.2	8.5	8.5	7.3	4.8	5.1	9.4	8.8	5.9	5.9	4.0	6.6
10	6.2	8.2	11	7.1	4.9	5.1	13	8.6	5.9	5.6	3.8	6.4
11	6.1	8.3	14	7.0	5.3	5.3	18	8.5	5.8	5.3	3.8	7.3
12	6.0	8.2	11	7.0	5.6	5.2	16	8.3	7.3	5.5	3.8	7.3
13	6.1	8.1	9.8	6.6	5.7	5.2	16	8.3	6.7	5.2	3.6	11
14	6.0	8.0	9.5	6.1	5.7	5.2	14	8.6	8.5	5.3	4.5	9.1
15	5.8	7.7	13	5.3	5.7	5.3	15	8.8	7.6	5.3	4.9	8.3
16	5.6	8.1	13	5.1	5.7	5.3	15	8.3	7.3	4.9	4.5	7.9
17	5.5	8.1	11	6.0	6.0	5.6	14	8.0	7.0	4.8	4.2	7.5
18	5.5	9.3	9.7	6.4	5.9	6.2	14	7.9	6.7	4.9	4.0	10
19	6.3	9.1	9.5	6.1	5.8	6.4	14	7.5	6.5	4.6	3.6	9.5
20	6.2	8.7	9.3	6.2	5.8	11	13	7.4	6.5	4.6	3.5	9.1
21	6.0	8.1	8.5	6.2	5.9	17	13	7.3	6.4	4.4	3.6	9.3
22	6.0	7.6	8.6	6.3	5.7	18	16	7.2	6.2	4.2	5.0	8.6
23	5.9	7.5	8.6	6.1	5.9	13	14	7.0	6.0	4.3	5.8	8.2
24	5.9	7.5	8.5	6.0	5.9	12	13	6.8	6.0	4.0	7.4	8.1
25	5.9	7.6	8.5	5.6	5.8	14	12	6.6	6.0	3.8	6.7	25
26	5.8	8.0	8.5	5.3	5.7	13	12	6.4	5.7	4.2	13	33
27	5.9	7.7	8.3	5.2	5.9	11	12	6.4	5.6	4.5	12	20
28	5.7	7.6	8.0	5.5	5.9	11	11	6.4	6.0	4.1	10	24
29	5.6	7.6	8.0	5.5	5.9	11	11	6.7	6.0	3.9	9.0	29
30	6.0	7.3	8.1	5.3	------	9.7	11	7.4	5.6	3.7	8.5	19
31	6.7	------	7.9	5.6	------	9.3	------	6.8	------	3.6	8.0	------
TOTAL	187.9	254.9	278.8	197.1	163.9	252.0	367.8	254.8	190.7	153.7	167.5	343.3
MEAN	6.06	8.50	8.99	6.36	5.65	8.13	12.3	8.22	6.36	4.96	5.40	11.4
MAX	6.7	14	14	7.9	6.0	18	18	11	8.5	6.8	13	33
MIN	5.5	7.2	7.0	5.1	4.8	5.1	8.5	6.4	5.6	3.6	3.4	6.4

CAL YR 1971 TOTAL 2,679.2 MEAN 7.34 MAX 26 MIN 2.9
WTR YR 1972 TOTAL 2,812.4 MEAN 7.68 MAX 33 MIN 3.4

05401050 Tenmile Creek near Nekoosa, Wis.

LOCATION.--Lat 44°15'44", long 89°48'38", in NE 1/4 sec.32, T.21 N., R.6 E., Wood County, on left bank upstream from bridge on State Highway 13, 5.8 miles southeast of Nekoosa.

DRAINAGE AREA.--64 sq mi, approximately.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1962-63. October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 967.39 ft above mean sea level. Prior to May 13, 1964, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--9 years, 56.1 cfs.

EXTREMES.--Current year: Maximum discharge, 247 cfs Sept. 30 (gage height, 5.70 ft); minimum daily, 23 cfs Feb. 14-18.

Period of record: Maximum discharge, 326 cfs Apr. 4, 1969 (gage height, 6.07 ft); minimum, 9.5 cfs Dec. 16, 1964 (gage height, 3.65 ft), result of freezeup.

REMARKS.--Records good except those for winter periods, which are fair. Approximately 40 miles of drainage ditches and 22 check dams are used to control the water table in the basin. Sprinkler irrigation from ground-water sources is developing rapidly in the area.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Dec. 23 to Jan. 15, Jan. 25 to Mar. 10.)

3.8	18	5.0	129
4.0	28	5.5	210
4.5	68	6.0	310

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	51	56	52	29	25	87	102	66	44	37	64
2	48	66	54	50	28	25	84	108	64	53	38	63
3	54	74	54	49	28	27	83	105	62	53	37	60
4	52	72	54	48	27	26	83	101	60	51	35	58
5	50	70	56	50	27	26	82	97	60	49	34	57
6	49	68	56	48	26	26	86	95	60	48	34	59
7	48	63	58	47	26	26	90	92	58	50	36	60
8	48	63	62	46	25	26	85	89	56	50	36	57
9	47	63	66	45	25	26	87	87	55	53	36	55
10	46	62	80	43	25	26	92	86	53	51	32	53
11	46	61	100	42	24	27	109	84	53	49	32	54
12	44	60	94	41	24	27	120	84	57	49	32	56
13	44	59	84	40	24	27	133	86	59	48	31	65
14	43	58	74	40	23	27	140	95	64	48	36	69
15	42	58	90	40	23	28	142	103	64	49	39	66
16	41	59	95	40	23	28	145	97	60	46	39	63
17	41	61	81	40	23	30	146	92	58	45	38	61
18	41	63	71	43	23	33	143	87	57	45	36	69
19	44	66	73	41	24	42	137	83	55	43	38	73
20	47	66	72	42	24	53	129	81	54	42	42	72
21	49	64	70	41	24	72	123	78	52	40	49	71
22	48	58	67	42	24	85	134	76	51	39	50	69
23	46	60	64	40	24	79	143	73	49	39	51	66
24	46	60	64	40	24	87	136	72	48	39	55	65
25	46	59	62	37	25	89	127	70	47	38	58	101
26	46	60	58	33	25	98	120	68	46	39	65	162
27	46	60	54	32	25	96	115	67	45	41	80	220
28	45	60	50	31	25	100	110	68	45	40	78	222
29	44	58	52	30	25	101	106	69	47	39	72	229
30	46	58	50	30	------	92	102	71	46	38	67	240
31	48	------	52	29	------	89	------	68	------	36	65	------
TOTAL	1,435	1,860	2,073	1,272	722	1,569	3,419	2,634	1,651	1,394	1,408	2,679
MEAN	46.3	62.0	66.9	41.0	24.9	50.6	114	85.0	55.0	45.0	45.4	89.3
MAX	54	74	100	52	29	101	146	108	66	53	80	240
MIN	41	51	50	29	23	25	82	67	45	36	31	53

CAL YR 1971 TOTAL 21,526 MEAN 59.0 MAX 198 MIN 23
WTR YR 1972 TOTAL 22,116 MEAN 60.4 MAX 240 MIN 23

05401100 Fourteenmile Creek near New Rome, Wis.

LOCATION.--Lat 44°12'15", long 89°48'29", in S 1/2 sec.17, T.20 N., R.6 E., Adams County, 50 ft above twin culverts on State Highway 13, and 2.7 miles southeast of New Rome.

DRAINAGE AREA.--77 sq mi, approximately.

PERIOD OF RECORD.--Annual maximum and occasional low-flow measurements, water years 1961-64. March 1964 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 980 ft (from topographic map). Prior to Mar. 2, 1964, crest-stage gage only at datum 7.03 ft lower, and Mar. 2, 1964, to Aug. 27, 1964, nonrecording gage and crest-stage gage.

AVERAGE DISCHARGE.--8 years, 40.1 cfs.

EXTREMES.--Current year: Maximum discharge, 374 cfs Sept. 30 (gage height, 5.68 ft); minimum daily, 4.5 cfs Aug. 11.

Period of record: Maximum discharge, 374 cfs Sept. 30, 1972; minimum, 0.65 cfs Jan. 25-27, 1968 (gage height, 1.45 ft).

REMARKS.--Records good. Some regulation caused by manipulation of gates at recreation dam above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second).

Oct. 1 to Sept. 24

1.9	2.6	3.1	90
2.1	10	3.5	125
2.3	23	4.0	165
2.7	54	5.0	260

Sept. 24-30

3.0	81	4.5	205
3.5	125	5.0	260
4.0	165	5.7	378

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	20	36	45	21	19	58	62	26	13	8.7	54
2	11	36	27	45	21	20	58	64	26	22	10	49
3	15	44	27	44	21	19	58	62	26	17	8.3	44
4	12	58	27	44	21	20	58	60	25	15	6.2	42
5	10	70	27	42	21	19	57	57	22	13	5.5	41
6	11	68	34	29	20	19	57	55	23	12	6.6	40
7	9.6	63	39	25	20	19	57	52	21	17	8.3	39
8	10	66	39	26	20	18	54	49	20	18	7.9	36
9	9.6	66	39	26	20	18	54	46	21	26	6.2	35
10	9.2	66	39	26	20	18	54	44	17	24	4.7	32
11	8.7	67	39	26	20	17	53	43	15	20	4.5	33
12	7.9	67	39	27	20	17	52	42	22	20	5.8	36
13	8.3	68	39	33	20	10	52	44	26	20	6.2	46
14	7.9	68	39	37	19	4.8	53	52	38	20	8.7	44
15	7.9	67	42	36	18	5.2	54	52	38	20	11	42
16	8.3	63	43	35	17	10	54	50	32	17	10	41
17	7.5	60	44	34	18	17	56	48	27	17	11	43
18	7.9	56	44	33	19	19	58	44	25	17	10	68
19	17	55	45	32	20	20	48	41	21	14	18	83
20	76	55	55	32	20	20	38	37	18	13	25	93
21	90	56	63	25	20	29	37	36	15	12	36	92
22	76	56	63	21	19	46	37	35	13	11	38	85
23	60	56	63	22	19	65	37	32	12	12	35	77
24	37	57	63	22	19	72	15	30	12	9.2	34	74
25	20	56	63	22	19	66	34	28	12	7.1	33	135
26	20	56	62	22	19	65	58	26	12	8.3	52	213
27	20	54	61	22	19	64	65	26	12	9.2	58	298
28	16	52	60	22	19	63	65	25	12	7.9	60	327
29	14	52	59	22	18	61	62	28	13	7.9	59	356
30	14	48	52	22	------	59	60	35	12	8.7	57	360
31	14	------	45	22	------	58	------	29	------	7.5	53	------
TOTAL	651.8	1,726	1,417	921	567	977.0	1,553	1,334	614	455.8	697.6	2,958
MEAN	21.0	57.5	45.7	29.7	19.6	31.5	51.8	43.0	20.5	14.7	22.5	98.6
MAX	90	70	63	45	21	72	65	64	38	26	60	360
MIN	7.5	20	27	21	17	4.8	15	25	12	7.1	4.5	32

CAL YR 1971 TOTAL 12,797.4 MEAN 35.1 MAX 142 MIN 2.1
WTR YR 1972 TOTAL 13,872.2 MEAN 37.9 MAX 360 MIN 4.5

05401535 Big Roche a Cri Creek near Adams, Wis.

LOCATION.--Lat 44°05'52", long 89°46'30", in SW 1/4 sec.22, T.19 N., R.6 E., Adams County, at culverts on Brown Deer Avenue, 0.5 mile upstream from Dry Creek, and 10 miles north of Adams.

DRAINAGE AREA.--54 sq mi, approximately.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 959.45 ft above mean sea level. Prior to May 15, 1964, nonrecording gage at same site at datum 1.71 ft higher.

AVERAGE DISCHARGE.--9 years, 56.5 cfs.

EXTREMES.--Current year: Maximum daily discharge, 250 cfs Sept. 29, 30; minimum, 30 cfs Feb. 26 (gage height, 1.59 ft), result of freezeup.

Period of record: Maximum daily discharge, 250 cfs Sept. 29, 30, 1972; minimum, 24 cfs Dec. 31, 1964 (gage height, 1.36 ft), result of freezeup, Feb. 28 (gage height, 1.47 ft).

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, which are fair. There is some irrigation from ground-water sources in the upper portion of basin.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Oct. 1 to Dec. 16, June 24-27; stage-discharge relation affected by ice Dec. 19 to Feb. 12.)

1.6	30	3.0	93
2.0	48	4.0	143
2.5	70	5.0	193
		5.8	263

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	56	57	60	48	44	73	85	61	50	44	73
2	45	84	63	58	47	46	71	89	59	59	49	72
3	48	82	64	56	49	46	71	90	58	53	44	64
4	52	71	61	56	50	47	68	86	56	50	41	62
5	47	68	61	60	48	50	69	82	56	49	40	60
6	46	66	60	60	49	49	70	81	56	49	40	59
7	46	63	61	60	48	47	72	80	54	52	44	58
8	47	63	61	58	48	46	68	77	53	52	44	57
9	47	63	63	58	47	47	71	76	54	58	42	55
10	46	63	67	58	47	47	74	75	53	54	40	54
11	46	62	81	58	48	46	90	74	52	50	40	54
12	45	61	78	56	48	48	99	73	62	49	39	56
13	46	60	65	54	48	50	111	73	63	48	38	67
14	46	59	72	56	50	51	117	84	67	47	40	69
15	45	58	86	58	49	53	116	93	72	49	46	62
16	45	60	98	56	47	53	118	81	62	47	42	62
17	45	62	86	54	51	53	115	76	59	46	40	68
18	45	64	70	54	48	56	110	72	57	48	38	74
19	50	68	72	52	46	57	106	69	56	46	50	72
20	57	64	74	52	50	64	101	67	55	45	51	70
21	53	63	72	52	48	96	98	67	55	44	88	66
22	51	58	68	52	46	112	106	66	53	42	67	64
23	49	60	68	52	49	87	117	64	52	44	59	70
24	49	59	68	50	48	81	114	62	52	43	61	130
25	49	60	66	50	47	79	105	61	52	41	62	180
26	50	61	64	50	47	79	97	60	52	43	86	220
27	50	63	62	50	47	77	93	59	51	49	106	230
28	51	62	58	48	47	77	89	59	51	45	89	240
29	49	63	56	49	48	79	87	61	55	43	76	250
30	51	63	56	49	------	78	85	66	52	41	70	250
31	56	------	58	49	------	74	------	65	------	40	67	------
TOTAL	1,504	1,909	2,096	1,685	1,393	1,919	2,781	2,273	1,690	1,476	1,683	2,968
MEAN	48.5	63.6	67.6	54.4	48.0	61.9	92.7	73.3	56.3	47.6	54.3	98.9
MAX	57	84	98	60	51	112	118	93	72	59	106	250
MIN	45	56	56	48	46	44	68	59	51	40	38	54

CAL YR 1971 TOTAL 22,025 MEAN 60.3 MAX 169 MIN 33
WTR YR 1972 TOTAL 23,377 MEAN 63.9 MAX 250 MIN 38

PEAK DISCHARGE (BASE, 110 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	0200	3.48	117	4-23	1600	3.50	118
4-16	1100	3.53	120	9-29	-	-	a250

a About.

NOTE.--No gage-height record Sept. 15-30.

05402000 Yellow River at Babcock, Wis.

LOCATION.--Lat 44°18'05", long 90°07'15", in NW 1/4 sec.14, T.21 N., R.3 E., Wood County, on right bank at downstream side of bridge on State Highway 80 at Babcock, 1.9 miles upstream from Hemlock Creek.

DRAINAGE AREA.--223 sq mi.

PERIOD OF RECORD.--March 1944 to current year.

GAGE.--Water stage recorder. Datum of gage is 954.75 ft above mean sea level. Prior to Oct. 28, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--28 years, 136 cfs (8.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,220 cfs Sept. 29 (gage height, 14.17 ft); minimum, 11 cfs June 14-16, 25-28.

Period of record: Maximum discharge, 11,600 cfs Apr. 2, 1952 (gage height, 17.38 ft); minimum observed, 1.0 cfs Oct. 1, 1948 (gage height, 1.22 ft).

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, which are fair. There is a large recreation dam about 5 miles upstream.

REVISIONS (WATER YEARS).--WSP 1308: 1944(M), 1946-47(M), 1949(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 1 to Nov. 19, Nov. 30 to Dec. 4, May 19 to June 26, Sept. 25-30; stage-discharge relation affected by ice Nov. 20-29, Dec. 5 to Apr. 9.)

1.5	5.2	3.3	184	10.0	1,880
1.8	16	4.5	389	12.0	3,360
2.1	39	6.0	659	14.0	5,400
2.6	96	8.0	1,060		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	76	30	38	13	24	450	158	20	14	250	90
2	115	93	28	36	13	24	350	473	20	13	140	60
3	103	149	27	33	13	26	240	895	20	14	60	52
4	90	319	28	32	13	29	190	738	19	16	35	46
5	40	283	30	29	13	31	170	395	17	18	31	42
6	43	226	34	28	13	29	220	292	13	16	30	39
7	49	96	40	25	13	27	280	188	13	16	45	36
8	42	66	45	23	13	27	350	109	15	15	110	34
9	36	107	52	21	13	27	450	108	14	15	760	32
10	35	110	60	20	13	27	651	103	14	17	450	31
11	31	107	80	19	14	27	1,270	91	14	20	200	29
12	29	95	130	18	15	28	2,530	82	17	30	90	28
13	30	53	250	17	16	31	2,960	77	14	28	64	27
14	28	71	410	16	18	40	3,080	75	13	90	56	27
15	26	70	280	15	22	52	2,230	79	12	180	1,100	26
16	26	58	220	15	38	64	2,670	90	15	140	150	25
17	27	45	280	14	54	58	2,920	92	14	220	80	25
18	29	56	330	14	50	52	2,110	79	14	170	50	150
19	35	70	390	14	43	50	1,640	66	13	80	45	200
20	40	64	170	13	39	47	2,700	57	12	45	45	90
21	41	58	110	13	35	60	1,460	49	14	30	45	66
22	42	60	76	13	33	100	971	43	13	28	45	134
23	47	56	66	13	31	190	1,320	31	12	27	46	152
24	48	52	58	13	30	410	1,220	27	12	64	54	97
25	50	50	54	12	28	680	910	27	11	50	140	86
26	73	47	52	12	26	900	557	25	11	40	700	636
27	74	43	64	13	25	760	424	22	11	50	1,800	3,630
28	74	43	54	13	25	660	247	23	11	24	1,000	2,020
29	73	39	48	14	25	620	215	24	12	22	600	3,560
30	73	37	45	13	------	600	176	28	13	21	330	2,570
31	76	------	41	13	------	520	------	25	------	31	170	------
TOTAL	1,711	2,699	3,582	582	697	6,220	34,961	4,571	423	1,544	8,721	14,040
MEAN	55.2	90.0	116	18.8	24.0	201	1,165	147	14.1	49.8	281	468
MAX	186	319	410	38	54	900	3,080	895	20	220	1,800	3,630
MIN	26	37	27	12	13	24	170	22	11	13	30	25
CFSM	.25	.40	.52	.08	.11	.90	5.22	.66	.06	.22	1.26	2.10
IN.	.29	.45	.60	.10	.12	1.04	5.83	.76	.07	.26	1.45	2.34

CAL YR 1971 TOTAL 54,935 MEAN 151 MAX 4,310 MIN 11 CFSM .68 IN 9.16
WTR YR 1972 TOTAL 79,751 MEAN 218 MAX 3,630 MIN 11 CFSM .98 IN 13.30

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-14	0100	11.83	3,210	8-27	-	-	a2,000
4-23	1600	9.30	1,530	9-29	1600	14.17	5,220

NOTE.--No gage-height record June 27 to Sept. 21.

a About.

05403500 Lemonweir River at New Lisbon, Wis.

LOCATION.--Lat 43°52'47", long 90°09'40", in SE 1/4 sec.8, T.16 N., R.3 E., Juneau County, near center of span on downstream side of bridge on State Highway 80 in New Lisbon, 200 ft downstream from recreation dam and 1.2 miles upstream from Webster Creek.

DRAINAGE AREA.--500 sq mi, approximately.

PERIOD OF RECORD.--March 1944 to current year.

GAGE.--Nonrecording gage. Datum of gage is 867.05 ft above mean sea level. Prior to May 5, 1948, nonrecording gage at site 100 ft downstream at same datum.

AVERAGE DISCHARGE.--28 years, 348 cfs (9.45 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,460 cfs Sept. 28 (gage height, 12.30 ft, from graph based on gage readings); minimum observed, 83 cfs June 30 (gage height, 1.21 ft).

Period of record: Maximum discharge, 6,880 cfs May 8, 1960 (gage height, 12.94 ft, from graph based on gage readings); minimum observed, 36 cfs Aug. 15, 1944 (gage height, -0.06 ft).

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by dam 200 ft upstream. Water diverted periodically into the basin from the Yellow and Black River basins for cranberry culture.

REVISIONS (WATER YEARS).--WSP 1308: 1944(M), 1949-50(M). WSP 1728: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Aug. 20 to Sept. 4, Sept. 14-30; stage-discharge relation affected by ice Dec. 28, Jan. 3-6, Jan. 16 to Mar. 16.)

1.2	82	7.0	1,030
2.0	143	9.0	1,870
3.0	250	11.0	3,370
5.0	560	12.0	4,390

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	386	289	360	307	180	190	916	693	145	102	243	713
2	352	427	357	331	180	180	851	700	153	134	226	537
3	362	459	379	330	180	190	810	726	165	142	206	408
4	386	458	371	320	180	180	760	815	131	137	190	308
5	474	472	382	300	180	190	711	877	126	130	185	263
6	456	508	342	290	170	210	717	861	128	126	181	239
7	405	520	349	290	170	210	784	779	124	133	181	223
8	352	517	363	294	160	210	784	691	116	133	188	216
9	294	453	340	298	160	200	731	604	115	152	190	205
10	282	408	416	304	160	200	717	535	114	151	189	192
11	282	363	482	301	160	200	740	443	112	144	205	205
12	280	346	506	304	160	200	812	376	143	166	200	192
13	273	340	459	289	160	210	1,090	335	156	160	200	273
14	260	312	472	258	170	220	1,350	333	155	144	190	346
15	251	275	642	256	170	250	1,380	333	163	143	200	418
16	243	262	774	240	180	290	1,370	350	151	144	200	451
17	236	276	740	230	180	421	1,360	384	142	159	200	435
18	226	301	700	230	180	612	1,290	381	142	188	200	544
19	229	321	675	240	170	827	1,200	312	140	195	230	840
20	236	329	682	250	170	1,010	1,090	266	128	187	294	1,090
21	243	340	708	250	170	1,560	1,030	242	120	192	368	1,360
22	245	336	656	240	180	2,040	1,170	217	116	191	590	1,480
23	252	321	584	230	180	2,090	1,220	201	116	202	736	1,350
24	270	318	488	230	180	2,120	1,270	179	116	204	835	1,110
25	279	311	443	220	190	2,040	1,250	161	120	193	841	1,080
26	291	318	416	200	190	1,810	1,190	149	117	213	864	1,760
27	291	329	340	190	190	1,540	1,090	144	111	304	936	3,200
28	293	343	350	190	200	1,350	999	133	105	350	929	4,240
29	279	359	296	180	200	1,180	892	132	97	333	968	4,190
30	273	346	340	180	------	983	769	138	88	298	978	3,640
31	287	------	335	180	------	952	------	133	------	270	884	------
TOTAL	9,269	10,957	14,747	7,962	5,100	23,905	30,343	12,623	3,835	5,720	13,027	31,508
MEAN	299	365	477	257	176	771	1,011	407	128	185	420	1,050
MAX	474	520	774	331	200	2,120	1,380	877	163	350	978	4,240
MIN	226	262	296	180	160	180	711	132	88	102	181	192
CFSM	.60	.73	.95	.51	.35	1.54	2.02	.81	.26	.37	.84	2.10
IN.	.69	.82	1.10	.59	.38	1.78	2.26	.94	.29	.43	.97	2.34

CAL YR 1971 TOTAL 144,555 MEAN 396 MAX 2,080 MIN 93 CFSM .79 IN 10.75
WTR YR 1972 TOTAL 169,046 MEAN 462 MAX 4,240 MIN 88 CFSM .92 IN 12.58

05403630 Hulburt Creek near Wisconsin Dells, Wis.

LOCATION.--Lat 43°37'37", long 89°48'36", in SW 1/4 sec.5, T.13 N., R.6 E., Sauk County, on left bank 300 ft upstream from highway bridge, 2.0 miles west of Wisconsin Dells, and 1.6 miles upstream from mouth.

DRAINAGE AREA.--11.1 sq mi.

RECORDS AVAILABLE.--October 1970 to current year.

GAGE.--Water-stage recorder.

EXTREMES.--Current year: Maximum discharge, 93 cfs Aug. 26 (gage height, 4.76 ft); minimum, 1.3 cfs June 24. Period of record: Maximum discharge, 93 cfs Aug. 26, 1972 (gage height, 4.76 ft); minimum, 1.3 cfs June 24, 1972.

REMARKS.--Records fair through May and poor thereafter.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	4.5	3.9	3.5	3.1	3.8	4.2	5.3	2.7	2.4	2.7	17
2	2.5	8.2	3.9	3.5	3.1	3.5	4.4	5.8	2.6	4.1	6.7	8.2
3	4.0	4.3	4.0	3.3	3.1	3.3	4.4	5.4	2.3	2.8	3.4	5.3
4	3.0	3.5	4.0	3.3	3.1	3.4	4.3	4.7	2.4	2.2	2.4	5.0
5	2.7	3.5	4.1	3.6	3.1	3.4	4.9	4.4	2.6	2.1	2.3	4.8
6	2.6	3.4	4.3	3.8	3.0	3.3	7.1	4.3	2.4	2.1	3.6	4.8
7	2.4	3.3	4.8	3.5	3.0	3.3	7.0	4.2	2.3	2.2	8.5	4.7
8	2.8	3.4	4.8	3.5	3.0	3.4	4.7	4.1	2.2	2.2	4.8	4.7
9	2.8	3.9	4.7	3.6	3.0	3.2	4.8	4.1	2.4	3.5	3.9	4.4
10	2.8	4.0	4.1	3.5	3.0	3.2	5.6	4.0	2.4	2.5	2.8	4.4
11	2.8	4.0	5.2	3.4	3.1	3.5	6.0	3.9	2.3	2.6	4.4	5.2
12	2.5	4.0	4.1	3.4	3.1	4.0	5.8	3.8	4.2	3.1	4.1	6.2
13	2.8	4.1	3.5	3.2	3.1	4.0	7.7	4.2	2.9	2.8	3.0	26
14	2.5	4.1	3.8	3.2	3.1	5.7	5.7	7.6	12	2.2	2.8	9.1
15	2.7	4.1	11	3.2	3.2	7.4	5.6	9.4	4.3	2.8	3.2	6.4
16	2.8	5.7	4.1	3.2	3.2	9.4	7.0	4.9	2.8	2.7	3.0	5.7
17	2.7	5.3	4.8	3.2	3.3	29	5.8	4.1	2.3	4.1	2.6	5.6
18	2.9	5.8	3.4	3.2	3.3	44	5.6	3.9	2.2	4.2	2.3	17
19	2.9	4.9	3.8	3.2	3.2	22	5.3	3.8	2.2	2.9	4.3	11
20	2.7	4.4	3.8	3.2	3.3	22	4.9	3.5	2.2	2.9	6.2	8.6
21	3.2	4.1	3.5	3.2	3.2	18	8.8	3.4	2.3	3.6	4.3	7.9
22	3.2	3.9	3.4	3.4	3.2	7.7	14	3.4	2.1	2.6	5.4	6.2
23	2.4	3.9	3.9	3.2	3.2	5.4	7.0	3.3	1.8	3.5	4.0	5.8
24	3.0	4.1	4.0	3.4	3.2	4.9	5.8	3.2	1.9	2.9	3.5	5.8
25	3.0	4.2	3.8	3.3	3.2	4.7	5.4	3.3	2.0	2.4	7.1	10
26	2.9	4.7	3.4	3.4	3.1	4.7	5.0	3.1	2.0	4.7	59	23
27	3.4	4.7	3.5	3.3	3.2	4.6	4.8	3.0	2.0	5.6	13	10
28	3.4	4.3	3.2	3.3	3.3	4.7	4.7	2.8	2.4	2.8	7.1	10
29	3.1	4.4	3.2	3.3	3.3	4.7	4.8	2.9	2.3	2.6	7.0	15
30	3.3	4.1	3.8	3.2	------	4.3	4.8	5.8	2.2	2.3	4.9	8.8
31	3.4	------	3.9	3.2	------	4.3	------	3.4	------	2.2	4.9	------
TOTAL	89.3	130.8	132.9	103.7	91.3	252.9	175.9	133.0	82.7	91.6	197.2	266.6
MEAN	2.88	4.36	4.28	3.35	3.15	8.16	5.86	4.29	2.76	2.95	6.36	8.89
MAX	4.0	8.2	11	3.8	3.3	44	14	9.4	12	5.6	59	26
MIN	2.4	3.3	3.2	3.2	3.0	3.2	4.2	2.8	1.8	2.1	2.3	4.4
CFSM	.26	.39	.39	.30	.28	.74	.53	.39	.25	.27	.57	.80
IN.	.30	.44	.45	.35	.31	.85	.59	.45	.28	.31	.66	.89

CAL YR 1971 TOTAL 1,661.5 MEAN 4.55 MAX 38 MIN 2.4 CFSM .41 IN 5.57
WTR YR 1972 TOTAL 1,747.9 MEAN 4.78 MAX 59 MIN 1.8 CFSM .43 IN 5.86

PEAK DISCHARGE (BASE, 30 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	0200	3.97	76	9-13	0600	3.74	52
8-26	0800	4.76	93	9-26	0900	3.38	44
9- 1	1300	3.13	33				

05403700 Dell Creek near Lake Delton, Wis.

LOCATION.--Lat 43°33'05", long 89°51'55", in NW 1/4 sec.2, T.12 N., R.5 E., on right bank 50 ft upstream from highway bridge, 6.0 miles southwest of Lake Delton, and 7.0 miles upstream from mouth.

DRAINAGE AREA.--44.9 sq mi.

RECORDS AVAILABLE.--September 1957 to September 1964, October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 847.49 ft above mean sea level, datum of 1929. Prior to Oct. 4, 1957, wire-weight gage 50 ft downstream at same datum.

AVERAGE DISCHARGE.--10 years, 27.3 cfs (8.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 276 cfs Mar. 17 (gage height, 6.30 ft); minimum, 15 cfs Mar. 11 (gage height, 2.21 ft).
Period of record: Maximum discharge, 992 cfs Mar. 2, 1965 (gage height, 8.38 ft); minimum, 10.9 cfs Aug. 1, 2, 1959 (gage height, 1.75 ft).

REMARKS.--Records good except those for periods of no gage-height record, winter periods, and periods of backwater from beaver dams, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	27	24	21	19	20	28	31	20	20	20	98
2	21	70	23	21	18	20	28	35	19	22	41	59
3	24	35	23	20	18	19	29	34	19	19	55	28
4	22	25	23	20	18	19	28	29	18	18	47	26
5	20	23	23	21	18	18	30	26	20	18	45	25
6	19	23	25	22	18	18	38	27	20	18	48	25
7	19	22	27	23	18	18	54	26	18	18	34	25
8	19	22	28	23	18	17	33	25	18	18	28	24
9	19	23	29	23	18	17	30	24	19	28	25	23
10	20	25	45	23	18	17	30	24	19	20	21	23
11	19	26	36	22	18	17	38	24	18	19	24	25
12	19	27	27	21	19	20	35	23	28	21	29	28
13	19	27	22	21	19	22	51	25	22	21	23	131
14	19	27	21	20	19	42	42	31	26	19	25	102
15	19	28	53	20	20	68	36	30	34	* 19	36	32
16	19	24	55	20	20	101	42	25	22	18	25	27
17	19	32	26	20	21	150	41	23	21	22	22	26
18	19	33	21	20	20	213	34	23	20	25	20	76
19	24	43	21	20	20	180	33	22	19	20	35	69
20	30	26	22	21	20	132	30	22	19	19	36	42
21	25	24	22	22	20	127	42	21	19	32	28	35
22	22	22	21	22	21	87	109	20	18	20	29	24
23	21	21	20	22	20	32	57	20	18	22	27	27
24	21	22	18	22	20	32	36	20	18	21	25	26
25	19	23	18	21	20	30	31	20	18	19	60	45
26	19	27	19	20	21	30	29	19	18	25	145	102
27	21	28	22	20	20	28	28	19	18	36	116	93
28	21	25	20	19	20	29	27	19	18	23	58	46
29	20	26	20	19	20	30	29	19	22	20	28	80
30	21	25	23	19	------	29	28	26	18	19	25	83
31	22	------	21	19	------	28	------	22	------	19	24	------
TOTAL	638	835	789	647	559	1,610	1,126	754	604	658	1,204	1,475
MEAN	20.6	27.9	25.5	20.9	19.3	51.9	37.5	24.3	20.1	21.2	38.8	49.2
MAX	30	70	55	23	21	213	109	35	34	36	145	131
MIN	19	21	18	19	18	17	27	19	18	18	20	23
CFSM	.46	.62	.57	.47	.43	1.16	.84	.54	.45	.47	.86	1.10
IN.	.53	.69	.65	.54	.46	1.33	.93	.62	.50	.55	1.00	1.22

CAL YR 1971 TOTAL 10,124 MEAN 27.8 MAX 221 MIN 18 CFSM .62 IN 8.39
WTR YR 1972 TOTAL 10,900 MEAN 29.8 MAX 213 MIN 17 CFSM .66 IN 9.03

NOTE.--Stage-discharge relation affected by beaver dams from Oct. 1 to Dec. 31, Aug. 2 to Sept. 30. No gage-height record Nov. 5-17, Jan. 1-6.

05404000 Wisconsin River near Wisconsin Dells, Wis.

LOCATION.--Lat 43°36'22", long 89°45'25", in NW 1/4 sec.14, T.13 N., R.6 E., Sauk County, on right bank 0.5 mile downstream from Dell Creek and 3.0 miles downstream from Wisconsin Dells.

DRAINAGE AREA.--7,830 sq mi, approximately.

PERIOD OF RECORD.--October 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 801.48 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1963, water-stage recorder at same site at datum 5.00 ft higher.

AVERAGE DISCHARGE.--38 years, 6,671 cfs.

EXTREMES.--Current year: Maximum discharge, 45,500 cfs Sept. 29 (gage height, 17.77 ft); minimum daily, 2,980 cfs July 3.

Period of record: Maximum discharge, 72,200 cfs Sept. 14, 1938 (gage height, 23.83 ft, present datum); minimum daily, 1,060 cfs Aug. 19, 1936.

REMARKS.--Records good. Flow regulated by 23 reservoirs above station (see p. 129). In 1938, when the maximum of record occurred, there were 21 reservoirs above station, the two large reservoirs, Petenwell and Castle Rock not yet in existence. Diurnal fluctuation caused by powerplant of Wisconsin Power & Light Co. at Wisconsin Dells, which shuts down frequently to 1,000 KWH, about 660 cfs, from powerplant records.

REVISIONS (WATER YEARS).--WSP 1728: 1936(m). WSP 1914: 1951, 1953-55.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 17-20, Jan. 5-8, Jan. 13 to Mar. 16.)

5.0	2,870	13.0	24,300
7.0	7,650	15.0	31,800
9.0	12,800	17.0	41,300
11.0	18,200	18.0	46,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.220	5.480	6.550	8.020	5.400	6.200	13.000	13.800	4.400	3.660	4.360	10.000
2	8.620	6.240	6.550	7.420	5.400	5.000	12.900	15.800	4.400	3.520	4.730	9.970
3	9.680	8.430	6.600	7.120	5.400	6.600	12.800	17.300	4.400	2.980	4.700	8.960
4	11.500	9.540	6.000	5.410	5.600	6.800	12.100	14.500	4.300	3.050	4.890	7.050
5	10.300	9.510	6.150	4.900	5.600	5.600	11.200	13.300	4.500	3.830	4.960	5.070
6	9.910	8.510	5.390	5.600	5.600	6.200	10.900	13.100	4.700	3.730	4.330	5.150
7	9.710	7.670	6.050	7.000	5.400	6.800	10.400	12.100	4.900	3.510	3.700	5.490
8	8.150	7.180	5.720	6.800	5.000	6.600	10.100	10.500	4.830	3.790	4.280	5.450
9	6.920	6.870	6.180	5.720	5.600	6.600	10.100	9.950	4.940	3.580	5.760	5.210
10	5.680	6.230	6.180	5.340	6.000	6.800	9.340	9.730	5.390	3.690	5.610	4.920
11	5.200	6.010	6.950	5.900	5.800	6.800	9.100	9.670	5.090	3.850	4.710	4.650
12	5.200	6.190	7.200	5.600	5.800	6.200	9.960	9.530	5.140	4.660	5.620	4.810
13	4.800	5.920	7.750	6.000	6.000	6.200	10.800	9.520	5.680	4.830	5.330	5.790
14	4.400	5.690	8.950	6.200	5.800	6.600	13.900	8.540	6.960	5.090	5.070	6.080
15	4.700	5.340	9.260	5.200	5.600	7.200	17.100	7.130	7.190	5.120	4.390	6.040
16	5.000	5.460	9.730	5.800	5.400	7.000	21.700	5.850	6.870	4.150	4.410	5.750
17	4.400	6.310	9.800	5.800	5.800	9.370	27.200	5.460	6.960	4.180	4.720	4.550
18	4.700	5.780	10.000	6.200	5.800	10.100	31.400	6.610	5.600	4.740	4.440	5.570
19	4.700	6.120	10.000	6.000	5.400	9.940	38.000	7.140	4.620	5.640	6.190	5.900
20	4.800	6.280	10.000	5.800	6.200	9.910	42.000	7.270	4.780	5.390	7.260	7.850
21	5.000	6.180	9.730	5.400	6.400	11.700	41.900	6.620	4.930	5.120	8.940	8.020
22	5.000	6.280	9.650	5.800	6.200	11.700	41.000	5.320	4.910	5.230	10.600	7.920
23	5.400	6.050	8.620	5.600	6.200	11.000	39.800	6.200	4.740	4.530	12.400	8.000
24	5.800	5.550	7.680	5.800	6.200	11.500	31.800	5.950	4.320	3.390	11.400	7.930
25	5.200	5.510	7.150	4.600	6.200	11.900	22.200	5.750	3.890	4.010	10.400	8.670
26	5.200	6.080	7.100	5.000	6.200	12.000	20.200	5.610	3.530	3.450	13.200	11.500
27	5.000	7.020	6.900	5.400	6.200	12.100	19.800	5.400	3.460	4.100	14.800	23.400
28	5.200	6.950	7.080	5.600	6.400	13.100	20.200	4.900	4.190	4.160	14.700	34.800
29	5.220	6.320	7.720	6.000	6.300	13.400	17.400	4.200	3.700	4.500	14.100	43.200
30	5.230	5.700	7.500	5.400	------	13.200	14.100	4.200	3.870	4.400	12.200	41.500
31	5.170	------	7.750	5.400	------	13.100	------	4.300	------	4.480	10.100	------
TOTAL	193.010	196.400	237.490	181.830	168.900	277.220	602.400	265.250	147.190	130.360	232.300	319.200
MEAN	6.226	6.547	7.674	5.865	5.824	8.943	20.080	8.556	4.906	4.205	7.494	10.640
MAX	11.500	9.540	10.000	8.020	6.400	13.400	42.000	17.300	7.190	5.640	14.800	43.200
MIN	4.400	5.340	5.390	4.600	5.000	5.000	9.100	4.200	3.460	2.980	3.700	4.550

CAL YEAR 1971 TOTAL 2,695,930 MEAN 7,386 MAX 35,400 MIN 2,500
WTR YEAR 1972 TOTAL 2,951,950 MEAN 8,065 MAX 43,200 MIN 2,980

05404500 Devils Lake near Baraboo, Wis.

LOCATION.--Lat 43°25'18", long 89°43'38", in NW 1/4 NE 1/4 sec.24, T.11 N., R.6 E., Sauk County, in Devils Lake State Park, 3.5 miles south of Baraboo.

DRAINAGE AREA.--5.64 sq mi. Area of Devils Lake, 361 acres.

PERIOD OF RECORD.--June 1922 to August 1930, June to August 1932, June 1934 to current year (fragmentary).

GAGE.--Nonrecording gage. Elevation of lake from reference mark read about twice a week except in winter. Datum of gage is 956.39 ft above mean sea level, unadjusted.

EXTREMES.--Current year: Maximum gage height observed, 7.71 ft May 14; minimum observed, 5.55 ft Mar. 20.
Period of record: Maximum gage height observed, 10.6 ft June 1, 1927; minimum observed, 1.49 ft Feb. 8, 1965.

REMARKS.--Lake has no surface outlet. Lake was ice covered Dec. 28 to Apr. 22. Add 955.00 ft to obtain elevation above mean sea level.

COOPERATION.--Observer services furnished by Ralph T. Tuttle, custodian, Devils Lake State Park.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			5.69					7.39	7.33			
2								7.50			6.71	6.97
3					5.82							
4							6.23	7.55				
5									7.26	6.66		
6								7.60				6.85
7				5.99				7.64	7.23		6.75	
8		5.89					6.29					
9								7.66				6.79
10			5.72		5.82				7.17			
11												
12							6.39	7.69	7.21	6.71	6.77	6.73
13	6.24						6.47					6.89
14				5.94	5.80		6.57	7.71	7.09			
15			6.04							6.67		
16								7.69	7.02		6.71	
17	6.10	5.85					6.67			6.67		
18							6.75	7.64				7.11
19										6.60		
20						5.55	6.87	7.57	6.89		6.77	
21				5.87			6.94					7.19
22							7.10	7.49	6.81			
23	6.04						7.17					
24							7.27		6.77		6.84	7.25
25								7.47	6.74	6.50		
26	5.97	5.74					7.29				7.01	7.41
27				5.84					6.69			
28						6.05	7.33			6.53		
29												
30					------			7.37	6.65			7.39
31	5.93	------	6.08		------		------		------	6.47		------

05405000 Baraboo River near Baraboo, Wis.

LOCATION.--Lat 43°28'51", long 89°38'09", in NW 1/4 sec.35, T.12 N., R.7 E., Sauk County, on left bank 50 ft downstream from highway bridge, 0.3 mile downstream from Rowley Creek and 5.3 miles east of Baraboo.

DRAINAGE AREA.--600 sq mi.

PERIOD OF RECORD.--December 1913 to March 1922. September 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 788.21 ft above mean sea level. Dec. 18, 1913, to Mar. 31, 1922, nonrecording gage at bridge 2.3 miles upstream at datum 7.6 ft higher. Sept. 24, 1942, to June 10, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--37 years (1914-21, 1942-current year), 360 cfs (8.15 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,350 cfs Mar. 22 (gage height, 17.65 ft); minimum, 118 cfs Jan. 27, result of freezeup.

Period of record: Maximum discharge observed, 7,900 cfs Mar. 26, 1917 (gage height, 17.5 ft, estimated, site and datum then in use), from rating curve extended above 6,000 cfs; minimum observed, 9 cfs Feb. 17, 1944 (gage height, 5.08 ft); minimum daily, 26 cfs Oct. 6, 1950.

Flood of Aug. 6, 1935, reached a stage of 15.8 ft, from floodmarks, site and datum in use in 1922 (discharge, 5,100 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation from several powerplants at Baraboo.

REVISIONS (WATER YEARS).--WSP 455: 1915. WSP 505: 1917(M). WSP 1438: 1914-15(M), 1916-17, 1918-20(M), 1944(M), 1949(M). WSP 1728: Drainage area. WSP 1914: 1948, 1950, 1956.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Jan. 4-6, Jan. 9 to Feb. 29, Mar. 2-5.)

6.4	107	11.0	1,180
7.0	226	13.0	1,740
8.0	436	15.0	2,400
9.0	675	18.0	3,490

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	237	262	216	170	170	324	355	159	130	209	1,240
2	183	335	224	212	170	170	311	369	166	172	291	1,150
3	205	434	250	210	160	170	307	422	166	176	388	971
4	207	578	242	200	160	170	305	453	166	176	336	646
5	218	593	248	200	160	170	310	443	166	176	255	404
6	232	493	246	200	160	177	360	399	164	169	223	320
7	211	379	249	189	160	181	491	352	157	145	320	287
8	184	306	268	186	160	181	578	325	157	124	443	265
9	184	243	296	190	160	173	635	306	160	124	466	248
10	184	228	336	190	160	178	624	284	160	158	434	238
11	184	227	369	190	160	186	524	261	160	220	355	231
12	184	228	421	190	160	216	485	248	169	205	273	227
13	184	227	420	180	170	235	559	240	168	182	248	510
14	180	220	380	180	180	328	618	236	175	204	313	931
15	176	210	427	170	180	576	739	248	269	220	352	867
16	175	220	699	170	180	915	893	268	348	209	354	888
17	175	229	692	170	180	1,330	987	273	305	188	355	917
18	178	291	571	170	180	1,620	871	263	241	189	299	1,100
19	185	338	581	170	170	1,840	705	245	204	202	327	816
20	192	361	518	180	170	2,160	582	232	182	223	1,170	782
21	226	359	433	180	170	2,710	551	221	172	281	1,280	844
22	249	335	381	180	170	3,280	1,060	213	165	233	1,260	804
23	276	291	316	180	170	2,960	1,250	199	166	225	1,170	737
24	275	251	274	180	170	2,480	1,140	192	164	214	1,110	546
25	245	231	250	170	180	1,990	1,090	189	161	210	985	489
26	225	230	241	170	180	1,490	968	174	160	222	1,920	765
27	208	239	240	170	180	869	665	162	160	224	2,170	1,030
28	215	257	234	170	180	503	460	159	154	263	1,680	1,090
29	207	282	220	170	180	405	393	156	144	307	1,480	1,340
30	214	288	217	170	------	361	368	158	130	303	1,500	1,660
31	228	------	228	170	------	333	------	157	------	239	1,420	------
TOTAL	6,391	9,140	10,733	5,673	4,930	28,527	19,153	8,202	5,418	6,313	23,386	22,343
MEAN	206	305	346	183	170	920	638	265	181	204	754	745
MAX	276	593	699	216	180	3,280	1,250	453	348	307	2,170	1,660
MIN	175	210	217	170	160	170	305	156	130	124	209	227
CFSM	.34	.51	.58	.31	.28	1.53	1.06	.44	.30	.34	1.26	1.24
IN.	.40	.57	.67	.35	.31	1.77	1.19	.51	.34	.39	1.45	1.39

CAL YR 1971 TOTAL 129,816 MEAN 356 MAX 1,960 MIN 130 CFSM .59 IN 8.05
WTR YR 1972 TOTAL 150,209 MEAN 410 MAX 3,280 MIN 124 CFSM .68 IN 9.31

05406050 Fish Lake near Sauk City, Wis.

LOCATION.--Lat 43°17'02", long 89°39'15", in NE 1/4 SW 1/4 sec.3, T.9 N., R.7 E., Dane County, on south side of lake near Ganser's Tavern and Dance Hall, 0.4 mile southwest of Crystal Lake, and 3.1 miles east of Sauk City.

DRAINAGE AREA.--3.79 sq mi. Area of Fish Lake, 252 acres.

PERIOD OF RECORD.--November 1966 to current year (fragmentary).

GAGE.--Nonrecording gage in lake bed. Altitude of gage is 853 ft (from topographic map).

EXTREMES.--Current year: Maximum gage height observed, 4.18 ft May 20; minimum observed, 3.23 ft Oct. 16.
Period of record: Maximum gage height observed, 4.85 ft July 10, 1969; minimum observed, 3.02 ft Aug. 29, 1970.

REMARKS.--Lake has no surface outlet. Lake ice covered Dec. 5 to Apr. 23.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										3.66		
2	3.50											3.90
3									3.94			
4			3.45									
5											3.68	
6		3.45						4.17				
7												
8	3.32									3.58		
9	3.27											3.82
10				3.58					3.88			
11												
12										3.60	3.65	
13		3.45						4.17				
14												
15										3.58		
16	3.23											3.80
17									3.84			
18												
19											3.80	
20		3.45						4.18				
21												
22					3.59					3.61		
23	3.31											3.94
24							4.13		3.71			
25												
26							4.13	4.02			3.92	
27		3.45						4.00				
28												
29										3.58		
30	3.35				------				3.67		3.88	3.92
31		------			------		------		------			------

05406500 Black Earth Creek at Black Earth, Wis.

LOCATION.--Lat 43°08'03", long 89°43'56", in SW 1/4 sec.25, T.8 N., R.6 E., Dane County, on right bank, 0.8 mile east of Black Earth and 2.1 miles upstream from Vermont Creek.

DRAINAGE AREA.--46.4 sq mi (includes 3.6 sq mi without surface drainage).

PERIOD OF RECORD.--February 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 812.95 ft above mean sea level.

AVERAGE DISCHARGE.--18 years, 28.6 cfs (8.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 451 cfs Mar. 17 (gage height, 4.39 ft); minimum, 14 cfs Mar. 8 (gage height, 1.63 ft).

Period of record: Maximum discharge, 1,750 cfs July 3, 1954 (gage height, 6.58 ft); minimum, 4.8 cfs Nov. 29, 1958 (gage height, 1.39 ft), result of freezeup.

REMARKS.--Records good.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 1 to Nov. 14, July 6 to Sept. 30; stage-discharge relation affected by ice Jan. 4-7, Mar. 5.)

1.7	18	3.0	169
2.0	43	3.5	256
2.5	96		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	32	23	28	24	28	29	35	26	19	26	30
2	24	108	22	28	24	25	28	37	25	20	37	30
3	26	41	22	28	23	23	29	35	25	18	30	28
4	24	32	22	27	23	23	28	33	24	19	27	27
5	24	32	22	26	23	22	35	32	25	20	27	26
6	24	29	24	26	22	22	54	36	25	21	28	26
7	24	28	28	26	22	24	48	37	26	21	28	25
8	24	27	30	27	22	23	39	35	26	21	28	26
9	24	28	42	28	22	22	38	33	25	22	27	25
10	26	27	40	27	22	21	47	31	26	22	26	25
11	25	27	38	28	22	78	38	31	26	22	31	27
12	24	26	32	27	23	102	37	30	27	22	27	27
13	24	25	29	27	24	55	37	31	25	24	26	43
14	24	26	28	26	25	51	36	35	25	23	29	35
15	24	25	70	25	25	76	39	34	25	26	32	30
16	24	25	50	25	25	140	38	32	24	23	30	28
17	23	25	34	26	26	217	36	31	25	25	28	27
18	23	30	36	27	25	169	34	31	25	25	27	27
19	25	28	34	29	25	88	33	30	24	24	44	30
20	24	27	42	28	24	53	32	29	24	24	57	29
21	23	26	31	27	24	90	47	29	24	24	41	30
22	25	24	31	27	24	62	66	28	23	23	34	28
23	24	24	30	27	24	41	47	27	24	26	32	27
24	24	24	30	26	24	38	40	27	22	24	35	28
25	26	24	29	25	24	36	37	27	21	24	44	34
26	25	26	29	24	24	34	36	26	22	26	64	43
27	25	24	30	23	24	33	34	25	22	26	45	36
28	25	24	28	23	25	32	33	27	23	25	36	33
29	24	24	26	23	24	32	34	27	23	24	32	34
30	25	23	29	23	------	31	33	26	20	25	31	32
31	24	------	28	24	------	30	------	26	------	26	29	------
TOTAL	753	891	976	811	694	1,756	1,132	953	731	714	1,038	896
MEAN	24.3	29.7	31.5	26.2	23.9	56.6	37.7	30.7	24.4	23.0	33.5	29.9
MAX	26	108	70	29	29	217	66	37	27	26	64	43
MIN	23	23	22	23	22	21	28	25	20	18	26	25
CFSM	.52	.64	.68	.56	.52	1.22	.81	.66	.53	.50	.72	.64
IN.	.60	.71	.78	.65	.56	1.41	.91	.76	.59	.57	.83	.72

CAL YR 1971 TOTAL 11,274 MEAN 30.9 MAX 135 MIN 19 CFSM .67 IN 9.04
WTR YR 1972 TOTAL 11,345 MEAN 31.0 MAX 217 MIN 18 CFSM .67 IN 9.10

NOTE.--No gage-height record Jan. 15 to Feb. 21.

05406640 Otter Creek near Highland, Wis.

LOCATION.--Lat 43°01'42", long 90°16'38", in NE 1/4 sec.5, T.6 N., R.2 E., Iowa County, on left bank 50 ft upstream from bridge on town road, 0.3 mile downstream from recreation reservoir outlet, 0.4 mile upstream from unnamed tributary, 2.2 miles upstream from Flint Creek and 5.3 miles southeast of Highland.

DRAINAGE AREA.--16.6 sq mi.

PERIOD OF RECORD.--May 1968 to June 1969, August 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 840 ft (from topographic map). Prior to August 1970 at site 100 ft upstream.

EXTREMES.--Current year: Maximum discharge, 83 cfs Mar. 17 (gage height, 2.07 ft); minimum, 1.2 cfs Nov. 11-17, 20-22 (gage height, 0.87 ft).

Period of record: Maximum discharge, 148 cfs Mar. 17, 1969 (gage height, 3.72 ft); minimum, 0.07 cfs Aug. 27, 1970 (gage height, 0.57 ft, result of shutdown of dam outlet).

REMARKS.--Records good except those less than 2.0 cfs, which are fair. Flow regulated by Black Hawk Lake reservoir 0.3 mile upstream. Pool surface area of reservoir is 222 acres. Supplemental discharge measurements on Narvison Branch which enters Otter Creek 0.5 mile downstream, are obtained to provide additional data for the drainage basin.

Narvison Branch discharge measurements (discharge in cubic feet per second)

Nov. 11, 1971......	1.18	Apr. 24......	2.06	Aug. 9......	1.97
Dec. 21............	1.25	May 23.......	1.83	Sept. 21....	2.27
Jan. 27, 1972......	1.37	June 28......	1.84		

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used June 14 to Sept. 5; stage-discharge relation affected by ice Jan. 3-6, 15, 18, Jan. 23 to Feb. 13.)

0.8	0.70	1.2	10
.9	1.6	1.4	23
1.0	3.2	1.6	37
		2.0	75

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.8	1.5	1.6	1.7	2.0	7.1	8.5	13	5.5	4.5	9.3
2	2.1	1.6	1.5	1.6	1.7	1.9	6.7	9.1	8.3	5.9	8.7	7.9
3	2.1	1.5	1.5	1.6	1.7	1.9	6.5	8.6	2.3	5.5	8.2	6.3
4	2.1	1.4	1.5	1.6	1.7	2.1	6.1	8.6	2.3	4.9	6.8	5.6
5	2.2	1.4	1.5	1.6	1.7	2.1	6.1	8.8	2.4	4.5	6.0	5.1
6	2.2	1.4	1.6	1.7	1.7	2.1	7.3	10	2.5	4.5	6.4	5.0
7	2.2	1.4	1.5	1.8	1.7	2.1	8.4	10	2.3	4.5	7.4	4.5
8	2.3	1.4	1.5	1.9	1.7	2.1	7.7	9.3	2.3	4.4	6.6	4.3
9	2.3	1.4	1.6	1.8	1.7	2.1	7.3	8.8	2.2	4.6	5.7	4.0
10	2.2	1.4	1.6	1.7	1.8	2.1	7.2	8.1	2.2	4.8	5.3	3.9
11	2.0	1.3	1.6	1.6	1.8	3.9	7.4	7.4	2.1	4.8	6.6	7.0
12	1.9	1.2	1.5	1.7	1.8	2.9	7.2	7.0	2.2	5.3	7.3	7.8
13	1.8	1.3	1.5	1.7	1.8	2.5	7.4	7.8	4.7	5.6	6.7	13
14	1.7	1.2	1.5	1.7	1.9	3.9	7.3	10	9.4	6.8	6.1	12
15	1.6	1.2	3.1	1.7	1.9	8.3	7.3	11	10	12	5.7	10
16	1.6	1.3	1.8	1.7	1.9	29	7.5	9.8	8.7	9.6	5.7	9.1
17	1.7	1.3	1.6	1.7	1.9	57	7.2	9.0	7.2	9.7	5.7	8.1
18	1.6	1.4	1.6	2.0	2.0	68	6.8	8.3	6.6	9.7	5.6	7.8
19	1.6	1.3	1.6	1.8	1.9	54	6.5	8.1	6.3	8.2	6.2	9.1
20	1.5	1.3	1.6	1.8	1.9	46	5.7	7.6	6.3	6.9	11	9.1
21	1.5	1.3	1.6	1.8	1.8	39	10	7.1	6.0	5.9	12	8.3
22	1.5	1.3	1.6	1.7	1.8	33	16	6.6	5.4	5.3	10	7.0
23	1.5	1.3	1.6	1.7	1.9	23	15	6.0	4.8	5.9	9.3	6.1
24	1.5	1.3	1.6	1.7	1.9	17	12	5.7	3.9	5.5	8.0	6.0
25	1.5	1.3	1.6	1.7	1.9	14	11	5.2	3.7	4.8	18	7.5
26	1.5	1.3	1.8	1.7	1.9	11	9.4	5.7	3.8	5.0	23	9.7
27	1.6	1.3	1.7	1.7	1.9	10	8.4	5.1	3.8	5.0	17	8.7
28	1.6	1.3	1.6	1.7	2.0	9.3	7.8	4.8	4.3	4.6	13	8.0
29	1.5	1.4	1.6	1.7	2.0	9.6	8.1	5.5	5.8	4.3	11	7.5
30	1.5	1.5	1.7	1.7	------	9.1	8.0	5.1	5.3	4.1	9.5	6.6
31	1.5	------	1.6	1.7	------	7.7	------	9.7	------	3.9	8.3	------
TOTAL	55.4	40.8	50.7	53.1	53.0	478.7	246.4	242.3	150.1	182.0	271.3	224.3
MEAN	1.79	1.36	1.64	1.71	1.83	15.4	8.21	7.82	5.00	5.87	8.75	7.48
MAX	2.3	1.8	3.1	2.0	2.0	68	16	11	13	12	23	13
MIN	1.5	1.2	1.5	1.6	1.7	1.9	5.7	4.8	2.1	3.9	4.5	3.9
CFSM	.11	.08	.10	.10	.11	.93	.49	.47	.30	.35	.53	.45
IN.	.12	.09	.11	.12	.12	1.07	.55	.54	.34	.41	.61	.50

CAL YR 1971 TOTAL 2,394.8 MEAN 6.56 MAX 23 MIN 1.2 CFSM .40 IN 5.37
WTR YR 1972 TOTAL 2,048.1 MEAN 5.60 MAX 68 MIN 1.2 CFSM .34 IN 4.59

05407000 Wisconsin River at Muscoda, Wis.

LOCATION.--Lat 43°11'54", long 90°26'26", in NW 1/4 sec.1, T.8 N., R.1 W., Grant County, on left bank at bridge on State Highway 80, 0.5 mile upstream from Eagle Mill Creek and 1.0 mile north of Muscoda.

DRAINAGE AREA.--10,300 sq mi, approximately.

PERIOD OF RECORD.--December 1902 to December 1903, October 1913 to current year. Monthly discharge only for October and November 1913, published in WSP 1308. Gage-height records collected at same site November 1908 to December 1912 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 667.05 ft above mean sea level. Prior to Nov. 22, 1929, nonrecording gage on bridge 200 ft upstream at same datum. Nov. 22, 1929, to Mar. 15, 1930, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--59 years (1913-72), 8,491 cfs.

EXTREMES.--Current year: Maximum discharge, 48,200 cfs Apr. 24 (gage height, 8.63 ft); minimum, 3,630 cfs July 5, 6 (gage height, 0.58 ft); minimum daily, 4,090 cfs July 5.

Period of record: Maximum discharge, 80,800 cfs Sept. 16, 1938 (gage height, 11.48 ft); minimum daily, 2,000 cfs Feb. 11, 1918.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by 23 reservoirs and many powerplants above station (see p. 129). In 1938 when the maximum of record occurred, there were 21 reservoirs above station, the two large reservoirs, Petenwell and Castle Rock not yet in existence. Usually less than about 5 cfs was diverted out of basin through Portage canal to Fox River throughout the year.

REVISIONS (WATER YEARS).--WSP 785: 1921(m). WSP 875: 1921. WSP 1308: 1915(M), 1917-18(M), 1920-21(M), 1924(M).

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 3 to Mar. 24.)

Oct. 1 to Mar. 12				Mar. 13 to Sept. 30			
1.4	5,080	3.0	11,000	0.7	3,930	3.0	11,700
2.0	7,080	4.0	15,300	1.0	4,720	5.0	21,100
		5.0	20,000	2.0	7,800	7.0	34,300
						9.0	51,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,330	5,940	7,790	9,220	6,900	8,300	15,600	20,100	5,440	5,710	5,530	15,700
2	6,080	6,370	7,470	9,840	6,800	8,000	15,600	16,700	6,030	4,770	6,780	14,500
3	8,690	8,300	7,880	9,700	7,000	7,300	15,300	16,900	6,270	5,940	7,210	14,000
4	9,960	8,740	7,520	8,200	6,900	7,000	14,000	18,500	5,700	5,680	6,780	13,100
5	10,600	10,000	7,510	7,200	6,900	7,600	14,300	19,100	6,060	4,090	5,940	10,900
6	11,200	10,400	7,340	6,900	6,900	7,400	14,500	16,000	5,960	4,240	6,210	9,620
7	10,800	10,700	7,100	7,000	6,900	7,600	13,900	16,100	5,790	4,750	6,270	7,040
8	9,590	9,550	7,420	9,200	7,000	8,400	13,600	15,000	6,030	5,210	6,400	7,560
9	10,600	9,040	7,750	8,400	6,800	9,000	13,100	14,300	5,910	4,750	5,590	7,380
10	8,370	8,640	7,810	8,000	6,800	8,400	12,600	13,800	6,720	5,050	5,330	7,380
11	7,400	7,970	8,880	7,800	7,200	8,500	12,600	12,300	6,120	5,420	5,860	7,180
12	6,960	7,440	8,910	7,400	7,500	8,600	12,400	11,700	6,000	5,050	6,880	7,180
13	6,060	7,570	9,200	7,200	7,600	8,500	12,100	11,400	7,620	5,210	7,210	7,910
14	6,440	7,670	9,880	6,500	7,800	8,000	12,500	11,500	6,560	6,180	6,370	9,240
15	5,670	8,790	11,500	6,000	7,600	8,200	13,600	12,000	7,980	6,060	6,520	9,280
16	6,090	7,530	11,700	5,900	7,400	8,600	16,100	10,300	8,720	6,850	5,970	8,900
17	5,230	7,350	11,200	7,000	7,300	8,600	18,800	8,790	8,460	5,970	6,240	8,750
18	5,530	8,620	8,550	7,800	7,400	11,000	22,700	9,200	7,700	6,120	6,090	8,600
19	6,320	7,590	9,240	7,800	7,500	13,000	25,400	7,280	7,870	5,730	6,780	9,390
20	5,870	7,840	11,400	7,400	7,300	13,500	29,500	8,790	6,560	6,120	7,910	9,510
21	6,110	8,130	11,500	7,200	7,500	15,000	37,800	8,900	6,120	6,520	9,660	9,550
22	5,780	7,730	11,400	7,000	7,900	16,000	44,800	8,680	6,060	6,850	10,600	10,100
23	6,450	7,610	10,800	7,400	8,100	16,500	47,700	8,620	6,210	6,680	11,700	11,400
24	6,040	7,490	10,500	7,000	8,100	16,500	47,700	7,110	5,730	6,560	12,800	9,320
25	6,650	7,160	10,000	6,800	7,600	16,800	46,800	8,150	5,530	5,730	13,500	10,600
26	6,540	7,750	9,700	6,500	7,500	16,400	43,400	7,730	5,420	5,130	15,200	11,600
27	6,100	7,720	9,010	6,200	8,000	17,200	36,400	6,810	5,590	6,150	15,400	12,100
28	6,170	8,700	8,990	6,300	8,200	16,800	26,100	7,210	4,830	5,020	17,200	14,300
29	6,500	8,080	7,870	6,600	8,300	16,200	24,300	6,400	5,050	5,190	18,200	19,900
30	6,370	7,060	9,350	7,200	------	15,900	23,400	6,490	5,300	5,440	18,200	26,000
31	6,140	------	9,070	7,200	------	15,500	------	6,650	------	5,560	16,700	------
TOTAL	221,680	243,620	285,920	228,960	214,700	354,800	696,400	350,920	189,120	173,730	287,050	328,190
MEAN	7,151	8,121	9,223	7,386	7,403	11,450	23,210	11,320	6,304	5,604	9,260	10,940
MAX	11,200	10,700	11,800	9,840	8,300	17,200	47,700	20,100	8,720	6,850	18,200	26,000
MIN	5,230	5,940	7,100	5,900	6,800	7,000	12,100	6,400	4,830	4,090	5,330	7,040

CAL YR 1971 TOTAL 3,345,150 MEAN 9,165 MAX 38,300 MIN 4,010
WTR YR 1972 TOTAL 3,575,090 MEAN 9,768 MAX 47,700 MIN 4,090

05408000 Kickapoo River at La Farge, Wis.

LOCATION.--Lat 43°34'27", long 90°38'35", on east-west quarter section line in W 1/2 sec.29, T.13 N., R.2 W., Vernon County, on left bank 10 ft upstream from bridge on State Highway 82, in La Farge, 0.3 mile upstream from Otter Creek, and 1.3 miles downstream from powerplant.

DRAINAGE AREA.--266 sq mi.

PERIOD OF RECORD.--October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 782.00 ft above mean sea level, adjustment of 1912. Prior to Dec. 4, 1939, nonrecording gage on highway bridge at same datum.

AVERAGE DISCHARGE.--34 years, 165 cfs (8.43 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,420 cfs Sept. 27 (gage height, 10.33 ft); minimum daily, 88 cfs Oct. 18.

Period of record: Maximum discharge, 9,910 cfs Feb. 9, 1966 (gage height, 13.67 ft); minimum, 1.8 cfs Mar. 24, 1951; minimum daily, 36 cfs Nov. 3, 1939.

REMARKS.--Records good except those for winter months, which are fair. Considerable diurnal fluctuation caused by operation of powerplant 1.1 miles upstream.

REVISIONS (WATER YEARS).--WSP 1388: 1951(M), 1954(M). WSP 1438: 1944-45(M), 1946, 1948, 1950(M).

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Period of ice effect, Dec. 29 to Mar. 18.)

Oct. 1 to Mar. 19				Mar. 20 to Sept. 30			
1.9	84	4.0	420	1.7	80	4.0	448
2.0	96	5.0	629	2.0	112	5.0	662
2.5	162	6.0	874	2.5	177	7.0	1,200
3.0	239	7.0	1,170	3.0	257	9.0	1,850

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	156	118	110	100	130	150	188	110	110	111	123
2	104	293	135	110	100	120	148	220	113	120	126	108
3	113	258	145	110	100	110	146	198	98	97	122	108
4	112	139	132	100	100	110	141	169	104	89	106	105
5	105	142	131	100	100	120	146	152	113	91	98	106
6	105	130	132	100	100	130	233	157	123	97	120	106
7	100	119	142	110	100	130	440	150	110	96	188	106
8	104	115	142	120	100	130	177	142	99	98	157	105
9	96	119	134	120	100	120	196	139	110	116	132	100
10	102	119	144	120	100	120	169	135	109	104	120	98
11	110	119	207	120	100	130	330	129	99	100	109	103
12	97	114	151	120	100	180	298	126	113	113	118	103
13	97	117	118	110	110	220	1,430	136	131	117	109	586
14	101	126	138	100	120	270	360	148	178	106	109	255
15	99	101	215	96	120	350	280	156	173	102	116	157
16	100	130	361	100	120	470	293	140	120	102	109	139
17	96	179	156	120	120	600	271	129	116	137	106	132
18	88	148	136	130	120	800	225	125	104	215	98	129
19	108	154	170	150	120	1,010	220	117	106	126	142	160
20	151	142	145	140	110	1,270	189	116	99	114	228	218
21	102	139	155	130	120	1,700	235	114	103	116	412	167
22	125	116	128	120	120	1,070	501	113	108	142	170	150
23	116	118	131	120	120	288	315	111	91	173	157	131
24	119	123	139	110	120	226	230	108	89	157	131	129
25	106	128	111	110	130	202	198	104	93	114	126	567
26	139	126	136	110	130	195	163	105	98	164	262	1,830
27	100	170	138	100	130	176	167	104	97	324	250	1,590
28	105	143	106	100	140	166	157	103	89	153	162	520
29	114	144	120	100	140	167	159	116	123	135	137	925
30	95	134	120	100	------	164	153	131	98	124	134	368
31	147	------	120	100	------	145	------	129	------	117	116	------
TOTAL	3,404	4,265	4,528	3,446	3,290	11,019	8,120	4,210	3,317	3,967	4,581	9,424
MEAN	110	142	146	112	113	355	271	136	111	128	148	314
MAX	151	293	361	150	140	1,700	1,430	220	178	324	412	1,830
MIN	88	101	106	96	100	110	141	103	89	89	98	98
CFSM	.41	.53	.56	.42	.42	1.33	1.02	.51	.42	.48	.56	1.18
IN.	.48	.60	.65	.49	.46	1.54	1.14	.59	.46	.55	.64	1.32

CAL YR 1971 TOTAL 56,737 MEAN 155 MAX 909 MIN 80 CFSM .58 IN 7.93
WTR YR 1972 TOTAL 63,716 MEAN 174 MAX 1,830 MIN 88 CFSM .65 IN 8.91

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	1515	9.48	2,040	9-27	0545	10.33	2,420
4-13	1315	9.50	2,050				

05409830 North Fork Nederlo Creek near Gays Mills, Wis.

LOCATION.--Lat 43°21'47", long 90°54'34", in NE 1/4 sec.12, T.10 N., R.5 W., Crawford County, on right bank 160 ft upstream from town-road bridge, 0.3 mile above the confluence with South Fork Nederlo Creek, and 4.5 miles northwest of Gays Mills.

DRAINAGE AREA.--2.3 sq mi.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 8, 1968. Altitude of gage is 800 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 0.76 cfs (4.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 84 cfs Mar. 15 (gage height, 12.92 ft); minimum, 0.49 cfs Jan. 4 (gage height, 10.71 ft), result of freezeup.

Period of record: Maximum discharge, 541 cfs June 23, 1968 (gage height, 14.60 ft) from rating curve extended above 3 cfs on basis of contracted-opening measurement made at 14.60 ft, computation of flow through culvert made at gage height 13.80 ft and slope-area measurement made at gage height 13.10 ft; minimum, 0.34 cfs Feb. 22, 1971 (gage height, 10.65 ft), result of freezeup.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WRD Wis. 1970: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Dec. 18, Jan. 4-5, 14-16, 25-26, Feb. 4, 7, Mar. 5.)

10.7	0.46	11.4	4.6
10.8	.80	11.7	9.0
11.0	1.6	12.0	18
11.2	2.8		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	.88	.70	.63	.63	.70	.77	.99	.66	.66	.77	.80
2	.63	.95	.70	.66	.63	.70	.77	1.0	.66	.63	.80	.73
3	.63	.77	.70	.63	.63	.70	.77	.91	.66	.63	.70	.70
4	.63	.73	.70	.66	.63	.66	.73	.84	.66	.60	.66	.70
5	.63	.70	.70	.66	.63	.66	.91	.84	.73	.63	.66	.66
6	.63	.66	.73	.66	.63	.66	1.2	.88	.66	.66	.66	.66
7	.63	.66	.73	.63	.63	.66	.80	.80	.66	.63	.66	.66
8	.63	.66	.73	.66	.60	.66	.80	.80	.66	.66	.66	.66
9	.63	.66	.73	.66	.63	.66	.80	.77	.66	.70	.63	.66
10	.63	.66	.84	.66	.66	.66	.80	.77	.66	.63	.60	.66
11	.63	.66	.80	.66	.63	.91	.80	.73	.66	.70	1.8	.73
12	.63	.66	.73	.66	.66	.91	.80	.73	.66	1.2	.77	1.4
13	.63	.66	.73	.66	.66	6.9	.80	.80	.70	.73	.73	1.2
14	.63	.66	.73	.66	.66	10	.80	.77	.77	.77	.70	.77
15	.63	.66	.95	.66	.66	13	.80	.77	.70	.77	.65	.73
16	.63	.80	.80	.63	.70	10	.91	.73	.66	.73	.63	.73
17	.63	.73	.73	.63	.70	12	.84	.73	.66	.95	.63	.70
18	.63	.77	.73	2.0	.66	3.6	.84	.70	.66	.77	.60	.66
19	.66	.73	.73	.70	.66	2.6	.80	.66	.66	.73	.70	.70
20	.66	.73	.70	.66	.70	1.2	.80	.66	.70	.70	1.4	.70
21	.66	.70	.66	.66	.66	.95	.95	.66	.66	.70	.91	.70
22	.66	.66	.66	.66	.66	.85	.91	.66	.66	.66	.73	.66
23	.70	.66	.66	.63	.66	.80	.88	.66	.63	.80	.73	.66
24	.66	.66	.66	.63	.66	.80	.80	.66	.66	.66	.73	.66
25	.66	.70	.66	.63	.66	.77	.77	.70	.66	.63	1.3	1.2
26	.66	.73	.66	.60	.70	.77	.77	.66	.66	.80	.95	1.4
27	.66	.73	.66	.60	.66	.77	.77	.66	.63	.70	.88	.84
28	.66	.73	.66	.60	.70	.73	.80	.70	.73	.66	.80	5.4
29	.66	.73	.66	.60	.70	.73	.84	.84	.66	.66	.73	1.1
30	.73	.70	.66	.60	------	.77	.88	.73	.66	.63	.73	.95
31	.70	------	.63	.60	------	.73	------	.70	------	.66	.73	------
TOTAL	20.10	21.39	22.12	21.24	19.05	76.54	24.91	23.51	20.11	22.04	24.64	28.78
MEAN	.65	.71	.71	.69	.66	2.47	.83	.76	.67	.71	.79	.96
MAX	.73	.95	.95	2.0	.70	13	1.2	1.0	.77	1.2	1.8	5.4
MIN	.63	.66	.63	.60	.60	.66	.73	.66	.63	.60	.60	.66
CFSM	.28	.31	.31	.30	.29	1.07	.36	.33	.29	.31	.34	.42
IN.	.33	.35	.36	.34	.31	1.24	.40	.38	.33	.36	.40	.47

CAL YR 1971 TOTAL 253.99 MEAN .70 MAX 1.2 MIN .60 CFSM .30 IN 4.11
WTR YR 1972 TOTAL 324.43 MEAN .89 MAX 13 MIN .60 CFSM .39 IN 5.25

05409890 Nederlo Creek near Gays Mills, Wis.

LOCATION.--Lat 43°21'43", long 90°52'44", in NW 1/4 sec.8, T.10 N., R.4 W., Crawford County, on right bank just upstream from bridge on private road, 1.2 miles upstream from Tainter Creek and 3.4 miles north of Gays Mills.

DRAINAGE AREA.--9.6 sq mi.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 4.28 cfs (6.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 233 cfs Mar. 17 (gage height, 13.40 ft); minimum daily, 3.4 cfs Jan. 30 to Feb. 2, Feb. 11.

Period of record: Maximum discharge, 2,600 cfs June 23, 1968 (gage height, 17.06 ft) from rating curve extended above 20 cfs on basis of slope-area measurement at site 1.2 miles upstream at gage height 17.06 ft, computation of flow through culvert at gage height 14.80 ft, and slope-area measurement made at gage height 13.36 ft; minimum, 1.7 cfs Feb. 16, 1968 (gage height, 10.78 ft), result of freezeup.

REMARKS.--Records good except those for winter periods, which are fair. Hydrologic studies are being made in the Nederlo Creek basin and additional data at upstream sites are available.

REVISIONS (WATER YEARS).--WRD Wis. 1970: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 5-6, 16, 24-25, Feb. 4, 6-7, 22.)

10.7	3.4	11.2	14
10.8	4.2	11.3	19
10.9	5.3	11.4	25
11.0	7.5	11.5	32
11.1	10	11.8	55

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	5.0	3.7	3.6	3.4	3.7	4.2	5.1	3.9	3.8	4.3	5.0
2	3.8	5.0	3.7	3.7	3.4	3.6	4.2	5.7	4.0	3.6	4.5	4.2
3	3.8	4.0	3.7	3.6	3.5	3.7	4.2	4.9	3.9	3.6	4.1	4.1
4	3.7	3.9	3.7	3.6	3.5	3.7	4.1	4.5	3.8	3.6	3.9	4.0
5	3.7	3.8	3.6	3.6	3.5	3.7	4.8	4.4	4.0	3.6	3.9	4.0
6	3.7	3.6	3.8	3.6	3.5	3.6	5.2	4.5	3.8	3.6	4.0	4.0
7	3.7	3.7	3.8	3.6	3.5	3.6	4.3	4.3	3.7	3.7	3.9	4.0
8	3.7	3.7	3.8	3.6	3.5	3.7	4.2	4.2	3.7	3.7	3.9	4.0
9	3.7	3.7	3.8	3.7	3.6	3.6	4.2	4.2	3.8	3.8	3.9	3.9
10	3.7	3.7	4.2	3.6	3.5	3.6	4.4	4.2	3.7	3.6	4.2	3.9
11	3.8	3.7	3.9	3.6	3.4	5.0	4.3	4.1	3.7	4.1	10	4.2
12	3.8	3.7	3.8	3.6	3.5	5.1	4.3	4.1	3.6	8.7	4.6	8.2
13	3.8	3.7	3.7	3.6	3.5	34	4.4	4.3	3.7	4.0	4.1	11
14	3.8	3.7	3.7	3.6	3.5	47	4.3	4.2	4.1	4.2	3.9	4.2
15	3.8	3.7	4.8	3.7	3.5	52	4.3	4.2	3.8	4.2	3.9	4.2
16	3.7	4.3	4.0	3.7	3.8	52	5.3	4.1	3.6	3.8	3.9	4.2
17	3.6	3.9	3.8	3.7	3.6	54	4.5	4.0	3.6	5.7	3.8	4.1
18	3.7	4.1	3.7	15	3.6	18	4.4	4.0	3.6	4.2	3.7	4.0
19	3.9	3.9	3.7	4.5	4.1	15	4.3	3.9	3.6	4.0	4.2	4.0
20	3.8	3.9	3.6	3.6	3.6	8.0	4.2	3.9	3.7	4.0	9.7	4.0
21	3.7	3.9	3.6	3.6	3.5	5.3	4.3	3.9	3.6	3.9	8.5	4.0
22	3.7	3.9	3.6	3.6	3.6	4.5	4.4	3.9	3.6	3.8	4.2	3.9
23	3.8	3.9	3.6	3.6	3.6	4.2	4.5	3.8	3.6	5.6	4.2	3.9
24	3.8	3.9	3.6	3.6	3.6	4.2	4.3	3.8	3.6	3.9	4.2	3.9
25	3.8	3.9	3.6	3.6	3.6	4.2	4.2	3.9	3.6	3.8	13	7.6
26	3.8	4.0	3.6	3.6	3.8	4.2	4.2	3.9	3.6	4.8	5.5	14
27	3.8	3.9	3.6	3.6	3.5	4.2	4.2	3.8	3.6	4.2	4.6	4.6
28	3.8	3.8	3.5	3.6	3.6	4.2	4.2	4.0	3.9	4.0	4.4	31
29	3.8	3.9	3.7	3.5	3.6	4.2	4.2	4.9	3.7	3.9	4.3	7.1
30	4.1	3.7	3.6	3.4	------	4.1	4.4	4.2	3.6	3.9	4.2	5.3
31	3.9	------	3.6	3.4	------	4.1	------	4.0	------	3.9	4.2	------
TOTAL	117.0	117.5	116.1	123.9	103.4	374.0	131.0	130.9	111.7	129.2	153.7	178.5
MEAN	3.77	3.92	3.75	4.00	3.57	12.1	4.37	4.22	3.72	4.17	4.96	5.95
MAX	4.1	5.0	4.8	15	4.1	54	5.3	5.7	4.1	8.7	13	31
MIN	3.6	3.6	3.5	3.4	3.4	3.6	4.1	3.8	3.6	3.6	3.7	3.9
CFSM	.39	.41	.39	.42	.37	1.26	.46	.44	.39	.43	.52	.62
IN.	.45	.46	.45	.48	.40	1.45	.51	.51	.43	.50	.60	.69

CAL YR 1971 TOTAL 1,526.5 MEAN 4.18 MAX 7.8 MIN 3.5 CFSM .44 IN 5.92
WTR YR 1972 TOTAL 1,786.9 MEAN 4.88 MAX 54 MIN 3.4 CFSM .51 IN 6.92

05410000 Kickapoo River at Gays Mills, Wis.

LOCATION.--Lat 43°19'10", long 90°51'08", in NE 1/4 sec.28, T.10 N., R.4 W., Crawford County, on upstream side of State Highway 171 bridge 300 ft downstream from dam in Gays Mills and 3.3 miles downstream from Taintor Creek.

DRAINAGE AREA.--616 sq mi.

PERIOD OF RECORD.--December 1913 to September 1934. Monthly discharge only July to September 1934, published in WSP 1308. April 1964 to current year.

GAGE.--Nonrecording gage. Datum of gage is 685.75 ft above mean sea level.

AVERAGE DISCHARGE.--28 years (1914-34, 1964-72), 412 cfs (9.08 inches per year).

EXTREMES.--Current year: Maximum discharge observed, 2,540 cfs Mar. 21 (gage height, 12.55 ft); minimum observed, 238 cfs Oct. 29.

Period of record: Maximum discharge, 10,600 cfs Feb. 10, 1966 (gage height, 16.00 ft); minimum observed, 48 cfs July 27, 1931 (gage height, 0.51 ft).

Flood in 1913 reached a stage of 15.2 ft, from floodmark (backwater from ice probable).

Flood in 1961 reached a stage of 16.37 ft, from floodmark.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation caused by dam 300 ft upstream.

REVISISONS (WATER YEARS).--WSP 1438: 1915-16(M), 1917, 1918-19(M), 1920-23, 1924-26(M), 1927-30, 1931(M), 1932, 1933-34(M).

Rating tables (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 1-28; stage-discharge relation affected by ice Dec. 30 to Mar. 14.)

Oct. 1 to Mar. 20				Mar. 21 to Sept. 30			
4.0	246	10.0	1,280	3.9	259	10.0	1,280
6.0	515	12.0	2,100	4.0	272	12.0	2,100
8.0	880	12.1	2,160	6.0	560	12.3	2,310
				8.0	888		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	294	333	270	240	280	468	470	340	278	344	420
2	252	415	326	260	240	280	413	527	318	275	364	390
3	258	491	312	260	240	270	442	554	319	271	355	364
4	254	462	314	250	240	260	434	515	292	266	330	354
5	261	335	323	250	240	250	430	464	292	268	302	336
6	256	314	317	250	250	250	470	446	295	264	304	325
7	256	304	328	260	250	250	590	449	312	263	326	326
8	255	300	327	270	250	250	739	413	294	269	410	330
9	256	306	330	270	250	250	506	410	295	272	389	326
10	253	302	335	270	250	250	494	389	289	288	351	322
11	258	302	345	270	250	260	500	369	295	285	436	312
12	256	300	354	260	260	300	629	371	288	375	491	315
13	255	304	364	260	260	380	746	378	285	344	645	640
14	252	288	322	250	260	700	1,020	381	343	334	449	867
15	256	297	366	250	270	1,190	911	395	354	329	367	634
16	257	319	483	260	270	1,480	730	399	395	308	353	444
17	259	356	568	270	280	1,840	677	378	360	315	336	404
18	255	402	384	320	280	2,070	598	354	301	404	336	393
19	260	353	343	390	280	2,080	554	344	286	390	336	392
20	275	327	322	370	280	2,150	534	334	285	362	365	422
21	307	323	310	350	280	2,260	539	329	292	330	520	422
22	287	326	317	330	280	2,060	701	326	293	308	712	425
23	283	300	302	310	280	2,110	860	325	282	385	428	419
24	283	301	300	300	290	1,550	686	308	272	420	400	379
25	277	309	296	290	290	755	571	306	275	389	378	425
26	277	320	294	280	290	602	524	308	273	340	527	792
27	261	309	314	270	290	595	485	301	275	389	570	1,240
28	302	308	253	260	280	524	467	299	277	571	570	1,360
29	259	314	258	260	280	488	468	333	278	470	449	1,940
30	283	312	260	250	------	479	466	337	275	297	404	2,140
31	281	------	280	250	------	470	------	348	------	312	395	------
TOTAL	8,245	9,893	10,280	8,660	7,700	26,933	17,652	11,860	9,030	10,371	12,942	17,858
MEAN	266	330	332	279	266	869	588	383	301	335	417	595
MAX	307	491	568	390	290	2,260	1,020	554	395	571	712	2,140
MIN	252	288	253	250	240	250	413	299	272	263	302	312

CAL YR 1971 TOTAL 135,173 MEAN 370 MAX 1,380 MIN 180
WTR YR 1972 TOTAL 151,424 MEAN 414 MAX 2,260 MIN 240

05410500 Kickapoo River at Steuben, Wis.

LOCATION.--Lat 43°11'27", long 90°52'28", in NW 1/4 sec.8, T.8 N., R.4 W., Crawford County, on right bank 0.8 mile upstream from Duffy Creek, 1.0 mile northwest of Steuben and 14 miles upstream from mouth.

DRAINAGE AREA.--690 sq mi.

PERIOD OF RECORD.--May 1933 to current year.

GAGE.--Water-stage recorder. Datum of gage is 657.82 ft above mean sea level, adjustment of 1912. Prior to Oct. 20, 1938, nonrecording gage at site 1 mile upstream at datum 1.3 ft higher.

AVERAGE DISCHARGE.--39 years, 450 cfs (8.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,520 cfs Mar. 21 (gage height, 9.22 ft); minimum, 278 cfs Dec. 30 (gage height, 2.98 ft).

Period of record: Maximum discharge, 10,800 cfs Mar. 28, 1961 (gage height, 12.33 ft); minimum observed, 161 cfs Aug. 9, 1936 (gage height, 0.76 ft, site and datum then in use).

REMARKS.--Records good except those for winter period, which are fair.

REVISIONS (WATER YEARS).--WSP 855: Drainage area. WSP 1438: 1933-38.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Shifting-control method used Oct. 15 to Dec. 30; stage-discharge relation affected by ice Dec. 31 to Mar. 16.)

2.9	289	7.0	1,000
3.0	303	8.0	1,250
4.0	450	9.0	2,080
5.0	600	10.0	4,570
6.0	780		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	360	382	360	310	360	518	524	382	335	387	454
2	360	450	368	360	310	350	506	556	364	328	430	459
3	376	512	352	330	310	340	507	598	351	348	418	422
4	338	558	374	320	310	330	498	580	341	335	398	396
5	337	453	375	320	310	330	488	538	332	306	374	384
6	339	394	369	320	310	330	507	519	335	296	362	378
7	337	378	375	330	310	320	582	500	346	304	368	376
8	334	364	381	340	310	320	713	484	348	311	406	380
9	334	360	393	340	310	320	632	466	334	324	429	372
10	334	356	405	340	310	320	543	447	328	330	404	362
11	325	354	424	340	310	320	546	436	334	335	408	366
12	327	352	446	340	320	350	590	426	334	454	1,010	368
13	328	352	446	330	320	440	664	424	328	418	574	715
14	324	351	399	330	330	740	959	432	354	384	436	786
15	320	346	405	320	340	980	1,080	442	394	368	402	847
16	324	360	489	320	340	1,250	1,050	446	434	346	387	567
17	321	398	579	330	350	2,250	768	435	390	351	382	477
18	324	440	501	370	350	2,300	704	412	350	402	370	447
19	335	438	420	490	350	2,400	630	398	337	476	366	429
20	344	420	446	470	350	2,400	591	386	332	456	384	459
21	362	405	484	420	350	2,440	582	374	335	386	586	518
22	382	386	464	390	350	2,440	658	366	325	358	618	492
23	342	375	432	370	360	2,320	860	360	320	426	572	458
24	357	366	400	350	360	2,320	856	352	316	452	478	430
25	348	364	378	340	360	1,910	664	348	306	459	470	482
26	346	372	372	330	360	998	586	346	304	412	603	828
27	344	390	368	320	360	679	546	344	304	420	597	1,110
28	372	396	354	310	360	614	518	337	309	546	646	1,200
29	346	416	318	310	360	574	514	357	313	532	540	1,270
30	337	396	342	310	------	555	510	381	317	417	474	1,460
31	357	------	340	310	------	536	------	382	------	393	440	------
TOTAL	10,593	11,862	12,581	10,760	9,680	32,146	19,390	13,396	10,197	12,008	14,719	17,692
MEAN	342	395	406	347	334	1,037	646	432	340	387	475	590
MAX	382	558	579	490	360	2,440	1,080	598	434	546	1,010	1,460
MIN	320	346	318	310	310	320	488	337	304	296	362	362
CFSM	.50	.57	.59	.50	.48	1.50	.94	.63	.49	.56	.69	.86
IN.	.57	.64	.68	.58	.52	1.73	1.05	.72	.55	.65	.79	.95

CAL YR 1971 TOTAL 155,159 MEAN 425 MAX 1,200 MIN 200 CFSM .62 IN 8.37
WTR YR 1972 TOTAL 175,024 MEAN 478 MAX 2,440 MIN 296 CFSM .69 IN 9.44

PEAK DISCHARGE (BASE, 1,900 CFS).--Mar. 21 (2400) 2,520 cfs (9.22 ft).

NOTE.--No gage-height record Jan. 15 to Feb. 19.

Reservoirs in Wisconsin River Basin

The 24 reservoirs listed below are used to stabilize the flow of the Wisconsin and Tomahawk Rivers for power utilization and are also used for recreational purposes. The first 21 reservoirs are owned and operated by the Wisconsin Valley Improvement Co., which furnished the gage heights and capacity tables. Revised capacity tables for all 21 reservoirs were received from the company in April 1957 and were used to compute month-end usable contents beginning Sept. 30, 1955. Another revised capacity table for Burnt Rollways Reservoir was used to compute month-end usable contents beginning Sept. 30, 1964. Lake Dubay is owned by the Consolidated Water Power Co. Petenwell and Castle Rock are owned and operated by the Wisconsin River Power Co., which furnished the gage heights and capacity tables for these two reservoirs. Month-end contents are computed by the U.S. Geological Survey. The usable capacity of these reservoirs is usually less in summer than in winter because the allowable summer drawdown is limited by the Department of Natural Resources in the interest of riparian property owners. There are occasionally formal or informal changes in capacity and in minimum drawdown levels. Usable capacity figures listed below are for winter regulation.

05390100 Lac Vieux Desert on Wisconsin River, lat 46°07'18", long 89°09'07", in SE 1/4 NE 1/4 sec.17, T.42 N., R.11 E., Vilas County, 4.8 miles northwest of Phelps, Wis., used as a reservoir since 1908, has a usable capacity of 652,000,000 cu ft. Drainage area, 28 sq mi. Datum of gage is 1,679.53 ft above mean sea level.

05390150 Twin Lakes on Twin River, lat 46°01'20", long 89°10'05", in SW 1/4 NE 1/4 sec.19, T.41 N., R.11 E., Vilas County, 5.0 miles southwest of Phelps, Wis., used as a reservoir since 1908, has a usable capacity of 313,000,000 cu ft. Drainage area, 26 sq mi. Altitude of gage is 1,640 ft (from river-profile map).

05390200 Buckatabon Lakes on Buckatabon Creek, lat 46°01'18", long 89°18'40", in SE 1/4 NE 1/4 sec.24, T.41 N., R.9 E., Vilas County, 3.3 miles southwest of Conover, Wis., used as a reservoir since 1908, has a usable capacity of 130,000,000 cu ft. Drainage area, 14 sq mi. Datum of gage is 1,637.85 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05390250 Sevenmile Lake on Sevenmile Creek, lat 45°52'30", long 89°04'07", in SE 1/4 NE 1/4 sec.11, T.39 N., R.11 E., Oneida County, 9.1 miles southeast of town of Eagle River, Wis., used as a reservoir since 1908, has a usable capacity of 93,000,000 cu ft. Drainage area, 14 sq mi. Datum of gage is 1,646.30 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05390300 Lower Ninemile Lake on Ninemile Creek, lat 45°53'37", long 89°07'15", in NE 1/4 NW 1/4 sec.4, T.39 N., R.11 E., Oneida County, 6.6 miles southeast of town of Eagle River, Wis., used as a reservoir since 1908, has a usable capacity of 121,000,000 cu ft. Drainage area, 25 sq mi. Datum of gage is 1,638.27 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05390350 Burnt Rollways Reservoir on Eagle River, lat 45°53'40", long 89°08'28", in NE 1/4 NW 1/4 sec.5, T.39 N., R.11 E., Oneida County, 5.3 miles southeast of town of Eagle River, Wis., used as a reservoir since 1908, has a usable capacity of 779,000,000 cu ft. This reservoir includes 18 lakes controlled by the same dam. Drainage area, 129 sq mi. Altitude of gage is 1,620 ft (from river-profile map).

05390400 Long Lake on Deerskin River, lat 46°02'37", long 89°02'44", in NW 1/4 SE 1/4 sec.7, T.41 N., R.12 E., Vilas County, 2.5 miles southeast of Phelps, Wis., used as a reservoir since 1908, has a usable capacity of 400,000,000 cu ft. Drainage area, 35 sq mi. Datum of gage is 1,695.14 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05390600 Deerskin Lake on Little Deerskin River, lat 45°59'07", long 89°09'40", in SE 1/4 sec.31, T.41 N., R.11 E., Vilas County, 6.3 miles northeast of town of Eagle River, Wis., used as a reservoir since 1908, has a usable capacity of 22,000,000 cu ft. Drainage area, 5 sq mi. Datum of gage is 1,640.16 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05390650 Sugar Camp Reservoir on Sugar Camp Creek, lat 45°52'19", long 89°23'40", in NE 1/4 sec.17, T.39 N., R.9 E., Oneida County, 7.6 miles southwest of town of Eagle River, Wis., used as a reservoir since 1908, has a usable capacity of 471,000,000 cu ft. Drainage area, 59 sq mi. Datum of gage is 1,591.94 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05390700 Little St. Germain Lake on Little St. Germain Creek, lat 45°53'57", long 89°27'08", in SE 1/4 sec.35, T.40 N., R.8 E., Vilas County, 9.6 miles west of town of Eagle River, Wis., used as a reservoir since 1908, has a usable capacity of 79,000,000 cu ft. Drainage area, 19 sq mi. Datum of gage is 1,611.54 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05390750 Big St. Germain Lake on St. Germain River, lat 45°55'06", long 89°31'55", in SE 1/4 sec.30, T.40 N., R.8 E., Vilas County, 5.0 miles south of Sayner, Wis., used as a reservoir since 1908, has a usable capacity of 202,000,000 cu ft. Drainage area, 69 sq mi. Datum of gage is 1,588.32 ft above mean sea level (levels by Public Service Commission of Wisconsin).

05390800 Pickerel Lake on St. Germain River, lat 45°52'22", long 89°31'47", in NE 1/4 sec.18, T.39 N., R.8 E., Oneida County, 5.0 miles northeast of town of Lake Tomahawk, Wis., used as a reservoir since 1935, has a usable capacity of 338,000,000 cu ft. Drainage area, 78 sq mi. Datum of gage is 1,582.00 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05390900 Rainbow Lake on Wisconsin River, lat 45°50'02", long 89°32'42", in SW 1/4 sec.30, T.39 N., R.8 E., Oneida County, 800 ft upstream from U.S. Geological Survey river gaging station, 2.7 miles northeast of town of Lake Tomahawk, Wis., used as a reservoir since 1935, has a usable capacity of 2,181,000,000 cu ft. Drainage area, 740 sq mi. Datum of gage is 1,570.00 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05391100 South Pelican Lake on Pelican River, lat 45°31'37", long 89°12'24", in S 1/2 sec.11, T.35 N., R.10 E., Oneida County, 2.8 miles northwest of town of Pelican Lake, Wis., used as a reservoir since 1909, has a usable capacity of 305,000,000 cu ft. Drainage area, 22 sq mi. Datum of gage is 1,589.98 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

Reservoirs in Wisconsin River Basin--Continued

05391300 North Pelican Lakes (includes Moen Lakes) on North Branch Pelican River, lat 45°38'05", long 89°14'38", in SE 1/4 sec.4, T.36 N., R.10 E., Oneida County, 0.2 mile below Twin Lakes Creek and 8.0 miles east of Rhinelander, Wis., city limits, used as a reservoir since 1908, has a usable capacity of 218,000,000 cu ft. Drainage area, 71 sq mi. Datum of gage is 1,569.10 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05392100 Minocqua Lake on Tomahawk River, lat 45°52'35", long 89°43'38", on line between secs.10 and 15, T.39 N., R.6 E., Oneida County, 1.0 mile west of Minocqua, Wis., used as a reservoir since 1910, has a usable capacity of 628,000,000 cu ft. Drainage area, 89 sq mi. Datum of gage is 1,584.56 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05392200 Squirrel Lake on Squirrel River, lat 45°50'37", long 89°54'13", in NE 1/4 sec.30, T.39 N., R.5 E., Oneida County, 9.4 miles west of Minocqua, Wis., used as a reservoir since 1908, has a usable capacity of 182,000,000 cu ft. Drainage area, 17 sq mi. Datum of gage is 1,560.93 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05392300 Willow Reservoir on Tomahawk River, lat 45°42'45", long 89°50'38", in NE 1/4 sec.10, T.37 N., R.5 E., Oneida County, 8.8 miles southwest of Hazelhurst, Wis., used as a reservoir since 1927, has a usable capacity of 3,302,000,000 cu ft. Drainage area, 327 sq mi. Datum of gage is 1,505.87 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05392500 Lake Nokomis on Tomahawk River, lat 45°32'20", long 89°44'48", in NW 1/4 sec.9, T.35 N., R.6 E., Lincoln County, at U.S. Geological Survey river gaging station, 0.5 mile east of Bradley, Wis., used as a reservoir since 1912, has a usable capacity of 1,808,000,000 cu ft. Drainage area, 548 sq mi. Datum of gage is 1,448.24 ft above mean sea level.

05393600 Spirit River Flowage on Spirit River, lat 45°26'18", long 89°44'30", in NE 1/4 sec.16, T.34 N., R.6 E., Lincoln County, 2.0 miles south of Tomahawk, Wis., used as a reservoir since 1923, has a usable capacity of 756,000,000 cu ft. Drainage area, 174 sq mi. Datum of gage is 1,420.53 ft above mean sea level.

05399600 Big Eau Pleine Reservoir on Big Eau Pleine River, lat 44°43'52", long 89°45'35", in SW 1/4 sec.14, T.26 N., R.6 E., Marathon County, 3.0 miles northeast of Dancy, Wis., used as a reservoir since 1937, has a usable capacity of 4,457,000,000 cu ft. Drainage area, 365 sq mi. Datum of gage is 1,115.00 ft above mean sea level (levels by Wisconsin Valley Improvement Co.).

05400295 Lake Dubay on Wisconsin River, lat 44°39'54", long 89°39'03", in sec.10, T.25 N., R.7 E., Wood County, 1.5 miles downstream from Little Eau Pleine River and 10.5 miles northwest of Stevens Point, has a usable capacity of 2,117,000,000 cu ft. Drainage area, 4,890 sq mi. Datum of gage is at mean sea level (power company levels).

05401400 Petenwell Flowage on Wisconsin River, lat 44°03'26", long 90°01'18", in SE 1/4 sec.4, T.18 N., R.4 E., Adams County, 5.2 miles upstream from Roche a Cri Creek, 2.4 miles west of Strongs Prairie, Wis., and 3.5 miles northeast of Necedah, Wis., used as a reservoir since 1950, has a total capacity of 19,880,000,000 cu ft. Drainage area, 5,869 sq mi. Datum of gage is 790.2 ft above mean sea level (levels by Wisconsin River Power Co.).

05403200 Castle Rock Flowage on Wisconsin River, lat 43°51'48", long 89°57'38", in sec.13, T.16 N., R.4 E., Adams County, 4.5 miles upstream from Duck Creek, and 2.0 miles south of Germantown, Wis., and 7.0 miles northeast of Mauston, Wis., used as a reservoir since 1950, has a total capacity of 7,630,000,000 cu ft. Drainage area, 6,860 sq mi. Datum of gage is 790.2 ft above mean sea level (levels by Wisconsin River Power Co.).

Month-end contents, in millions of cubic feet, water year October 1971 to September 1972

	Lac Vieux Desert	Twin Lakes	Buckatabon Lake	Sevenmile Lake	Lower Ninemile Lake	Burnt Rollways Reservoir	Long Lake	Deerskin Lake
Sept. 30......	284*	203*	108*	78*	121	762*	174	14*
Oct. 31.......	212	173	109	66	51	679	152	7
Nov. 30.......	124	98	119	74	72	732	142	4
Dec. 31.......	72	0	130	77	57	606	130	3
Jan. 31.......	14	0	52	79	2	158	68	3
Feb. 29.......	0	0	30	79	1	0	24	3
Mar. 31.......	26	24	37	79	8	258	12	7
Apr. 30.......	199	124	105	74	116	779	246	10
May 31.......	308	204	118	67	109	712	247	15
June 30.......	340	230	118	77	124	766	256	14
July 31.......	380	273	117	89	118	739	257	15
Aug. 31.......	401	286	118	83	120	736	252	15
Sept. 30......	340	289	118	86	123	738	246	14

Reservoirs in Wisconsin River Basin--Continued

Month-end contents, in millions of cubic feet, water year October 1971 to September 1972

	Sugar Camp Reservoir	Little St. Germain Lake	Big St. Germain Lake	Pickerel Lake	Rainbow Lake	South Pelican Lake	North Pelican Lakes	Minocqua Lake
Sept. 30......	453*	74*	162	249*	840*	241	142	532*
Oct. 31.......	423	61	168	268	2,115	237	136	370
Nov. 30.......	399	57	174	266	2,113	178	118	299
Dec. 31.......	368	47	151	238	1,966	148	64	225
Jan. 31.......	224	32	92	204	1,709	89	42	122
Feb. 29.......	16	11	38	166	1,056	63	28	110
Mar. 31.......	144	15	29	27	233	76	56	79
Apr. 30.......	459	66	151	237	1,144	248	166	45
May 31.......	427	75	168	278	2,056	273	143	437
June 30.......	414	76	164	278	1,295	228	137	550
July 31.......	408	75	162	266	1,128	228	139	502
Aug. 31.......	415	75	162	276	2,151	292	135	556
Sept. 30......	451	75	171	266	2,155	318	144	529

	Squirrel Lake	Willow Reservoir	Lake Nokomis	Spirit Lake Flowage	Big Eau Pleine Reservoir	Lake Dubay	Petenwell Flowage	Castle Rock Flowage
Sept. 30......	178*	1,583*	835*	324*	2,487*	4,552*	18,802*	6,761*
Oct. 31.......	155	2,844	1,684	564	2,885	4,461	18,820	6,684
Nov. 30.......	142	3,056	1,654	655	3,130	4,454	18,836	6,698
Dec. 31.......	65	2,493	1,470	596	3,450	4,291	18,768	6,418
Jan. 31.......	45	1,574	965	372	1,781	4,358	18,584	6,446
Feb. 29.......	2	607	740	134	187	4,233	17,879	5,158
Mar. 31.......	23	437	93	3	1,323	3,105	15,663	4,307
Apr. 30.......	142	2,298	1,533	659	4,396	4,911	19,754	7,548
May 31.......	152	2,944	1,654	563	3,966	4,818	19,448	7,300
June 30.......	155	2,178	1,429	418	3,427	4,358	18,624	6,656
July 31.......	148	1,716	1,271	435	3,335	4,304	18,580	6,782
Aug. 31.......	145	2,611	1,796	705	3,925	4,265	18,749	6,768
Sept. 30......	158	2,826	1,786	725	4,302	4,548	18,800	6,779

*Corrected

05413500 Grant River at Burton, Wis.

LOCATION.--Lat 42°43'13", long 90°49'09", in NW 1/4 sec.23, T.3 N., R.4 W., Grant County, on right bank at downstream side of highway bridge at Burton, 5.9 miles northwest of Potosi and 9.5 miles upstream from mouth.

DRAINAGE AREA.--267 sq mi.

PERIOD OF RECORD.--October 1934 to current year. Published as "near Burton" October 1934 to September 1947. Records published for both sites March to September 1947. October 1934, monthly discharge only, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 606.89 ft above mean sea level, adjustment of 1912. Oct. 17, 1934, to Sept. 30, 1947, nonrecording gage at site 6 miles upstream at datum 33.18 ft higher. Mar. 18, 1947, to July 27, 1949, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years, 158 cfs (8.04 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,900 cfs Mar. 15 (gage height, 20.52 ft); minimum daily, 64 cfs Jan. 26, backwater from ice.

Period of record: Maximum discharge, 25,000 cfs July 16, 1950 (gage height, 24.82 ft), from rating curve extended above 18,000 cfs on basis of slope-area measurement of peak flow; minimum, 21 cfs Mar. 4, 1954, result of freezeup.

REMARKS.--Records good except those for winter period, which are fair.

COOPERATION.--Five discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1308: 1935-37(M), 1941(M), 1945-46(M), 1949(M). WSP 1728: 1942(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Shifting-control method used Mar. 12-13, 15-16, Apr. 18-21; stage-discharge relation affected by ice Dec. 2-8, 18-20, 22, Dec. 26-Mar. 10.)

Oct. 1 to Apr. 22				Apr. 23 to Aug. 2				Aug. 3 to Sept. 30	
4.4	64	14.0	1,170	4.9	84	15.0	1,310	6.1	158
5.0	105	16.0	1,460	6.0	162	17.0	1,730	8.0	296
7.0	288	17.0	1,730	9.0	524	18.0	3,620	11.0	676
10.0	654	18.0	3,620	12.0	914			14.0	1,150
								16.0	1,490

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	138	94	110	78	500	124	185	114	94	689	554
2	94	468	86	100	78	220	124	214	112	105	2,250	223
3	115	163	90	94	76	170	125	216	112	96	457	190
4	114	135	94	84	74	120	121	184	107	89	300	181
5	98	127	98	80	72	100	120	175	108	87	252	176
6	95	118	100	82	72	90	131	220	112	86	333	172
7	93	108	110	84	70	110	136	278	103	89	536	171
8	95	113	115	90	70	140	124	239	104	88	290	171
9	96	116	123	96	70	130	132	221	389	286	245	161
10	94	115	135	98	70	140	156	200	136	113	222	160
11	92	113	154	96	72	580	150	184	116	115	225	1,340
12	92	110	134	96	74	2,940	138	172	114	622	265	338
13	92	108	126	84	76	1,400	139	175	114	174	220	856
14	91	106	122	76	78	816	135	185	169	119	202	400
15	90	105	376	70	80	1,380	136	207	128	499	192	314
16	89	114	338	68	78	1,660	167	169	111	161	187	284
17	88	130	168	72	76	816	180	155	106	588	181	259
18	90	128	190	96	76	616	149	142	104	364	176	241
19	104	136	210	150	74	315	142	140	104	205	171	228
20	126	119	180	140	74	276	139	138	115	168	168	222
21	111	114	155	110	74	279	167	135	109	149	166	216
22	108	106	140	94	74	281	320	131	103	138	163	207
23	99	109	128	84	76	174	221	126	99	346	162	204
24	102	112	130	76	78	149	187	124	97	177	160	204
25	105	111	130	70	80	139	167	123	96	143	203	220
26	100	115	120	64	82	137	154	119	96	135	184	421
27	100	123	110	68	88	132	145	117	94	134	196	246
28	102	114	100	74	100	133	140	114	97	138	173	220
29	101	117	110	78	120	136	148	128	105	136	163	223
30	104	112	120	80	------	126	160	138	98	130	158	213
31	114	------	120	80	------	126	------	117	------	124	164	------
TOTAL	3,094	3,903	4,406	2,744	2,260	14,331	4,577	5,171	3,572	5,898	9,453	9,015
MEAN	99.8	130	142	88.5	77.9	462	153	167	119	190	305	301
MAX	126	468	376	150	120	2,940	320	278	389	622	2,250	1,340
MIN	88	105	86	64	70	90	120	114	94	86	158	160
CFSM	.37	.49	.53	.33	.29	1.73	.57	.63	.45	.71	1.14	1.13
IN.	.43	.54	.61	.38	.31	2.00	.64	.72	.50	.82	1.32	1.26

CAL YR 1971 TOTAL 57,861 MEAN 159 MAX 1,260 MIN 66 CFSM .60 IN 8.06
WTR YR 1972 TOTAL 68,424 MEAN 187 MAX 2,940 MIN 64 CFSM .70 IN 9.53

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-12	0645	18.88	6,150	8- 2	0545	18.38	4,700
3-15	2345	20.52	10,900	9-11	1000	18.01	3,650

05414000 Platte River near Rockville, Wis.

LOCATION.--Lat 42°43'52", long 90°38'25", in SW 1/4 sec.17, T.3 N., R.2 W., Grant County, on right bank just downstream from bridge on County Trunk Highway B, 0.8 mile upstream from Blakely Branch, 2.2 miles east of Rockville, 4.5 miles northeast of Potosi, and 15.2 miles upstream from mouth.

DRAINAGE AREA.--139 sq mi.

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge only for October and November 1934, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 642.96 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1941, nonrecording gage at site 1.3 miles upstream at datum 12.55 ft higher. Oct. 1, 1941, to June 29, 1949, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years, 93.6 cfs (9.14 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,550 cfs July 14 (gage height, 10.97 ft); minimum daily, 42 cfs Feb. 6-9.

Period of record: Maximum discharge, 43,500 cfs July 16, 1950 (gage height, 17.26 ft), from rating curve extended above 7,000 cfs on basis of slope-area measurement of peak flow; no flow Nov. 24, 1950.

REMARKS.--Records good except those for winter periods, which are poor.

COOPERATION.--Seven discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1438: 1935-36, 1937(M), 1939(M), 1941-43, 1946(M).

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 2-6, 18, Dec. 27 to Mar. 12.)

Oct. 1 to Mar. 11				Mar. 12 to Sept. 30			
3.2	49	4.0	184	3.2	55	5.0	450
3.5	86	5.0	450	3.6	109	6.0	750
		6.0	750	4.0	184	7.0	1,050

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	111	54	72	45	180	74	104	79	61	90	119
2	56	260	50	68	44	110	72	112	76	80	438	91
3	66	120	54	62	44	74	71	116	76	66	176	83
4	62	96	56	56	43	66	79	108	74	61	130	81
5	58	88	60	52	43	58	79	109	74	60	112	80
6	57	78	66	54	42	54	94	137	76	59	158	78
7	54	73	70	58	42	62	94	154	74	57	166	78
8	55	71	70	60	42	86	79	142	71	55	124	76
9	56	72	78	70	42	74	88	128	83	83	111	76
10	56	73	90	76	43	70	102	121	75	63	103	80
11	56	71	110	70	45	400	98	112	71	61	104	252
12	54	70	86	68	45	800	86	106	70	81	176	139
13	54	68	74	62	45	432	81	109	71	87	109	332
14	54	67	90	48	44	417	80	130	79	705	100	176
15	54	66	400	44	44	921	81	144	77	420	94	150
16	54	67	210	43	45	798	98	118	68	97	93	120
17	54	72	160	43	45	796	97	109	67	168	90	116
18	56	80	100	70	46	332	90	103	67	144	87	102
19	75	80	130	210	46	240	87	98	67	93	86	97
20	76	76	116	120	47	206	81	96	70	84	84	96
21	70	73	104	80	47	240	102	91	68	76	84	97
22	66	70	94	70	47	193	172	88	66	72	83	90
23	62	68	94	64	47	94	133	87	63	88	83	88
24	62	70	96	60	48	81	116	84	62	90	83	88
25	61	70	91	56	49	79	102	83	61	70	96	133
26	60	72	91	52	50	74	96	81	60	75	111	242
27	59	75	76	50	54	71	88	80	60	80	93	116
28	59	71	62	49	60	68	86	79	61	71	84	106
29	58	75	74	48	70	71	91	84	66	68	81	108
30	62	71	78	47	------	66	96	94	63	66	79	100
31	66	------	74	46	------	72	------	80	------	65	79	------
TOTAL	1,851	2,472	3,068	2,028	1,354	7,275	2,793	3,287	2,095	3,406	3,587	3,590
MEAN	59.7	82.4	99.0	65.4	46.7	235	93.1	106	69.8	110	116	120
MAX	76	260	400	210	70	921	172	154	83	705	438	332
MIN	54	66	50	43	42	54	71	79	60	55	79	76
CFSM	.43	.59	.71	.47	.34	1.69	.67	.76	.50	.79	.83	.86
IN.	.50	.66	.82	.54	.36	1.95	.75	.88	.56	.91	.96	.96

CAL YR 1971 TOTAL 36,356 MEAN 99.6 MAX 885 MIN 35 CFSM .72 IN 9.73
WTR YR 1972 TOTAL 36,806 MEAN 101 MAX 921 MIN 42 CFSM .73 IN 9.85

PEAK DISCHARGE (BASE, 2,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-11	2300	a10.64	3,540	7-14	2400	10.97	5,550
3-15	2145	10.02	3,730				

a Backwater from ice.

05415000 Galena River at Buncombe, Wis.

LOCATION.--Lat 42°30'49", long 90°22'40", in SW 1/4 sec.33, T.1 N., R.1 E., Lafayette County, on left bank at Buncombe, 0.6 mile upstream from Coon Branch, 1.5 miles upstream from Scrabble Branch, 2.0 miles upstream from Wisconsin-Illinois State line, and 3.5 miles southeast of Hazel Green.

DRAINAGE AREA.--128 sq mi.

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 682.77 ft above mean sea level, adjustment of 1912 (Corps of Engineers bench mark). Prior to Dec. 1, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 73.1 cfs (7.76 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,780 cfs Aug. 2 (gage height, 12.94 ft); minimum, 12 cfs Jan. 4 (gage height, 2.85 ft, result of freezeup).

Period of record: Maximum discharge, 29,700 cfs June 29, 1969 (gage height, 19.57 ft) from rating curve extended above 8,100 cfs on basis of slope-area measurements at gage heights 15.68 ft and 19.57 ft; minimum, 0.8 cfs Mar. 3, 1954.

Flood in February 1937 reached a stage of about 17.1 ft, from information by local resident (discharge, 18,000 cfs).

REMARKS.--Records good except those for winter periods, which are fair.

REVISIONS (WATER YEARS).--WSP 1438: 1942(P), 1943(M), 1944(P), 1945(M).

Rating tables (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 1-4, Jan. 1 to Mar. 6.)

Oct. 1 to Feb. 29				Mar. 1 to Sept. 30			
2.9	14	3.8	70	3.0	21	6.0	602
3.0	17	4.2	118	3.4	53	7.0	980
3.4	36	5.0	265	4.0	127	8.0	1,420
				5.0	314	9.0	1,950

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	32	21	30	24	200	37	86	39	25	41	150
2	22	200	20	24	24	70	38	85	38	28	1,740	90
3	25	90	21	21	24	62	38	80	35	24	200	64
4	24	50	24	20	24	50	36	71	34	22	128	60
5	23	35	27	21	24	40	34	66	34	22	102	58
6	23	30	31	22	24	43	42	94	38	21	123	56
7	22	25	34	24	24	361	46	117	30	23	258	54
8	25	28	34	26	24	211	39	126	32	23	126	52
9	27	28	36	35	24	112	45	109	46	43	105	50
10	26	28	44	40	24	86	66	94	48	32	89	60
11	25	27	48	35	25	451	80	84	34	26	242	250
12	24	27	39	29	25	423	53	76	33	34	195	150
13	25	26	33	26	25	281	51	81	35	38	133	400
14	25	26	32	23	26	107	47	94	38	32	112	150
15	24	26	225	19	26	491	52	90	42	30	96	120
16	23	25	108	16	27	647	270	73	31	27	90	110
17	23	24	56	19	27	286	156	66	29	45	82	100
18	23	37	56	30	27	155	103	61	28	80	74	100
19	29	36	57	100	27	82	85	57	31	38	70	103
20	45	30	49	50	27	76	75	53	42	32	74	105
21	35	27	42	45	27	105	102	51	34	28	66	110
22	28	25	37	35	27	148	184	48	30	24	62	91
23	26	25	40	30	27	55	124	45	26	27	61	86
24	25	26	40	27	27	48	102	42	26	32	59	85
25	25	26	37	25	27	43	87	43	27	24	64	172
26	25	28	37	24	27	41	78	42	26	34	82	266
27	25	30	35	24	27	39	70	42	25	46	65	145
28	25	28	25	24	50	38	67	39	27	33	57	295
29	25	31	36	24	300	41	75	44	30	28	54	256
30	25	28	42	24	------	38	72	53	27	27	51	161
31	28	------	36	24	------	38	------	43	------	25	49	------
TOTAL	798	1,104	1,402	916	1,041	4,869	2,354	2,155	995	973	4,750	3,949
MEAN	25.7	36.8	45.2	29.5	35.9	157	78.5	69.5	33.2	31.4	153	132
MAX	45	200	225	100	300	647	270	126	48	80	1,740	400
MIN	22	24	20	16	24	38	34	39	25	21	41	50
CFSM	.20	.29	.35	.23	.28	1.23	.61	.54	.26	.25	1.20	1.03
IN.	.23	.32	.41	.27	.30	1.42	.68	.63	.29	.28	1.38	1.15

CAL YR 1971 TOTAL 21,837 MEAN 59.8 MAX 1,100 MIN 20 CFSM .47 IN 6.35
WTR YR 1972 TOTAL 25,306 MEAN 69.1 MAX 1,740 MIN 16 CFSM .54 IN 7.35

PEAK DISCHARGE (BASE, 3,000 CFS).--Aug. 2 (0830) 5,780 cfs (12.94 ft).

05426000 Crawfish River at Milford, Wis.

LOCATION.--Lat 43°06'00", long 88°50'58", in SW 1/4 sec.4, T.7 N., R.14 E., Jefferson County, near left bank on upstream side of highway bridge in Milford, 1.4 miles downstream from Rock Creek and 9.8 miles upstream from mouth.

DRAINAGE AREA.--732 sq mi.

PERIOD OF RECORD.--June 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 779.40 ft above mean sea level. Prior to July 28, 1966, non-recording gage at present site and datum.

AVERAGE DISCHARGE.--41 years, 329 cfs (6.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,270 cfs Mar. 25 (gage height, 6.49 ft); minimum, 4.2 cfs Oct. 27 (gage height, 1.23 ft).

Period of record: Maximum discharge, 6,140 cfs Apr. 6, 1959 (gage height, 11.15 ft); minimum observed, 0.2 cfs Sept. 15, 1958 (gage height, 1.11 ft).

REMARKS.--Records good except those for winter periods, which are fair. Some diurnal fluctuation at low flow possible, due to small dams upstream.

REVISIONS (WATER YEARS).--WSP 805: Drainage area. WSP 975: 1937-38. WSP 1438: 1932-33(M), 1935(M), 1937, 1938-41(M), 1943-44(M), 1947-48(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 1 to Mar. 24.)

1.4	13	2.5	280
1.5	20	3.0	495
1.7	45	5.0	1,450
1.9	86	7.0	2,550
2.1	140		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	79	80	170	100	100	1,570	800	144	56	100	616
2	47	112	74	150	100	100	1,430	815	129	81	105	584
3	47	129	72	130	100	98	1,320	817	131	96	138	548
4	49	140	70	120	100	94	1,190	799	120	100	135	515
5	52	99	72	120	100	92	1,110	772	107	97	127	489
6	59	179	76	130	100	92	1,070	785	116	86	138	452
7	49	159	80	130	98	94	1,080	817	102	85	207	444
8	36	137	84	130	98	96	1,040	812	93	84	212	470
9	47	150	88	130	98	100	993	776	103	90	247	445
10	45	143	96	140	100	100	992	731	97	85	234	417
11	49	126	100	130	110	110	987	681	62	79	269	414
12	38	126	110	130	110	110	967	624	82	74	357	411
13	39	112	120	120	110	110	970	595	108	96	395	438
14	25	79	130	110	110	110	930	584	114	119	446	493
15	33	112	160	100	110	120	926	576	164	193	494	531
16	47	104	220	110	100	120	921	548	171	184	510	554
17	32	86	280	110	100	130	855	521	161	165	547	607
18	26	86	470	110	100	140	816	496	142	192	546	764
19	25	91	430	110	94	160	823	464	124	176	537	901
20	49	112	400	110	90	180	773	432	152	155	498	1,030
21	44	137	380	110	90	320	708	389	160	173	455	1,340
22	56	75	350	110	90	900	842	346	144	155	426	1,460
23	61	72	330	110	90	1,500	897	316	129	148	397	1,550
24	49	75	310	110	90	2,100	967	286	102	154	362	1,600
25	39	75	290	100	90	2,260	973	267	92	141	354	1,600
26	29	77	240	100	92	2,250	959	241	84	119	443	1,670
27	13	89	220	98	96	2,200	923	219	73	130	551	1,720
28	50	89	210	96	98	2,060	881	190	73	122	611	1,760
29	68	99	210	98	98	1,910	844	170	85	115	643	1,830
30	50	81	200	98	------	1,830	802	201	75	104	646	1,820
31	45	------	190	100	------	1,690	------	170	------	94	626	------
TOTAL	1,339	3,230	6,142	3,620	2,862	21,276	29,559	16,240	3,439	3,748	11,756	27,473
MEAN	43.2	108	198	117	98.7	686	985	524	115	121	379	916
MAX	68	179	470	170	110	2,260	1,570	817	171	193	646	1,830
MIN	13	72	70	96	90	92	708	170	62	56	100	411
CFSM	.06	.15	.27	.16	.13	.94	1.35	.72	.16	.17	.52	1.25
IN.	.07	.16	.31	.18	.15	1.08	1.50	.83	.17	.19	.60	1.40

CAL YR 1971 TOTAL 140,206 MEAN 384 MAX 2,500 MIN 13 CFSM .52 IN 7.13
WTR YR 1972 TOTAL 130,684 MEAN 357 MAX 2,260 MIN 13 CFSM .49 IN 6.64

PEAK DISCHARGE (BASE, 1,250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-25	0900	6.49	2,270	9-29	1300	5.81	1,850

05428000 Lake Mendota at Madison, Wis.

LOCATION.--Lat 43°05'42", long 89°22'12", in SE 1/4 sec.12, T.7 N., R.9 E., Dane County, attached to left wall of lock of dam at outlet, in Madison.

DRAINAGE AREA.--254 sq mi. Area of Lake Mendota, 15.2 sq mi.

PERIOD OF RECORD.--December 1902 to May 1903, January 1916 to current year (incomplete).

GAGE.--Water-stage recorder. Datum of gage is 847.82 ft above mean sea level, or 2.22 ft above city of Madison datum. Prior to Nov. 15, 1971, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum gage height, 2.55 ft Sept. 26; minimum, 1.34 ft Mar. 11.
Period of record: Maximum gage height observed, 4.19 ft Apr. 5, 1959; minimum observed, 0.20 ft Feb. 24 to Mar. 10, 1920.

REMARKS.--Lake level regulated by concrete dam with two 12-foot tainter gates and 20-foot lock at outlet.

COOPERATION.--Gage-height record furnished by city engineer of Madison through Oct. 26, 1971. Record of recorder stage obtained thereafter in cooperation with the city of Madison.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.54		1.89	2.24	1.64	1.38	2.22	1.99	1.85	1.51	1.59	2.37
2	1.54		1.89	2.23	1.63	1.40	2.19	2.05	1.84	1.52	1.68	2.36
3	1.56		1.88	2.22	1.63	1.40	2.15	2.07	1.82	1.50	1.68	2.34
4	1.56		1.87	2.19	1.60	1.42	2.11	2.09	1.78	1.49	1.65	2.33
5	1.56		1.88	2.18	1.58	1.41	2.08	2.08	1.75	1.48	1.64	2.32
6	1.56		1.90	2.17	1.57	1.41	2.08	2.12	1.75	1.48	1.67	2.29
7	1.52		1.90	2.15	1.55	1.40	2.08	2.12	1.74	1.49	1.67	2.30
8	1.52		1.90	2.13	1.53	1.37	2.06	2.11	1.72	1.48	1.66	2.30
9	1.50		1.91	2.11	1.51	1.38	2.05	2.10	1.69	1.48	1.63	2.26
10	1.50		1.97	2.10	1.49	1.37	2.04	2.09	1.62	1.48	1.62	2.22
11	1.49		1.99	2.08	1.48	1.37	2.03	2.09	1.58	1.48	1.71	2.24
12	1.48		2.00	2.06	1.47	1.38	2.02	2.08	1.59	1.49	1.75	2.24
13	1.46		2.00	2.04	1.45	1.45	2.03	2.09	1.60	1.49	1.76	2.33
14	1.46		2.00		1.42	1.51	1.98	2.13	1.63	1.50	1.80	2.35
15	1.45	1.86	2.18		1.46	1.56	1.99	2.14	1.66	1.52	1.80	2.32
16	1.46	1.86	2.22		1.45	1.64	1.97	2.15	1.61	1.51	1.81	2.31
17	1.46	1.87	2.26		1.46	1.73	1.94	2.13	1.59	1.50	1.84	2.31
18	1.44	1.92	2.22		1.45	1.88	1.94	2.12	1.56	1.54	1.85	2.31
19	1.46	2.23	2.22		1.42	2.04	1.91	2.10	1.57	1.56	1.93	2.33
20	1.50	1.91	2.22		1.41	2.18	1.88	2.10	1.59	1.59	1.95	2.34
21	1.52	1.90	2.22		1.41	2.29	1.90	2.08	1.57	1.60	1.96	2.40
22	1.55	1.85	2.20		1.39	2.34	1.96	2.04	1.55	1.60	1.96	2.36
23	1.54	1.84	2.21		1.39	2.35	1.95	2.01	1.55	1.63	1.97	2.34
24	1.54	1.86	2.21	1.80	1.39	2.34	1.93	1.94	1.51	1.64	2.03	2.33
25	1.56	1.85	2.19	1.77	1.39	2.33	1.92	1.97	1.51	1.61	2.06	2.38
26	1.56	1.88	2.20	1.76	1.38	2.31	1.91	1.95	1.52	1.60	2.29	2.47
27		1.91	2.20	1.74	1.38	2.28	1.88	1.94	1.55	1.61	2.31	2.45
28		1.89	2.19	1.73	1.38	2.26	1.91	1.91	1.51	1.59	2.33	2.43
29		1.92	2.18	1.70	1.38	2.28	1.92	1.90	1.51	1.60	2.36	2.43
30		1.91	2.25	1.68	------	2.28	1.93	1.90	1.52	1.60	2.37	2.39
31		------	2.25	1.66	------	2.25	------	1.86	------	1.60	2.36	------
MEAN			2.08		1.47	1.81	2.00	2.05	1.63	1.54	1.89	2.34
MAX			2.26		1.64	2.35	2.22	2.15	1.85	1.64	2.37	2.47
MIN			1.87		1.38	1.37	1.88	1.86	1.51	1.48	1.59	2.22

05429000 Lake Monona at Madison, Wis.

LOCATION.--Lat 43°03'48", long 89°23'49", in SW 1/4 sec.23, T.7 N., R.9 E., Dane County, at end of concrete storm sewer in Brittingham Park, in Madison.

DRAINAGE AREA.--273 sq mi. Area of Lake Monona, 5.3 sq mi.

PERIOD OF RECORD.--September 1915 to current year (fragmentary) in reports of the Geological Survey. For 1856 to March 1917 in reports of Wisconsin Railroad Commission, Volume 19.

GAGE.--Water-stage recorder. Datum of gage is 843.61 ft above mean sea level, or 1.99 ft below city of Madison datum. Prior to Nov. 15, 1971, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum gage height, 1.87 ft Sept. 26; minimum, 0.46 ft Dec. 8, 9.
Period of record: Maximum gage height observed, 3.66 ft July 28, 1929; minimum observed, -0.39 ft Jan. 20, 1965.

REMARKS.--Lake level regulated by concrete dam with four 12-foot stop-log sections and 12-foot lock at outlet of Lake Waubesa.

COOPERATION.--Gage-height record furnished by city engineer of Madison through Oct. 26, 1971. Record of recorder stage obtained thereafter in cooperation with the city of Madison.

REVISION.--WSP 1338: Lake area.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.19		.50	.71	.91	.75	1.36	1.62	1.61	1.34	1.44	1.69
2		1.27	.49	.70	.91	.75	1.37	1.59	1.64	1.34	1.51	1.64
3			.49	.68	.92	.77	1.38	1.53	1.69	1.32	1.50	1.58
4	1.18		.48	.66	.93	.73	1.39	1.51	1.72	1.29	1.48	1.52
5		1.19	.47	.66	.93	.73	1.39	1.53	1.75	1.26	1.46	1.47
6	1.14		.48	.66	.93	.73	1.43	1.60	1.77	1.25	1.45	1.43
7			.48	.68	.93	.73	1.48	1.68	1.76	1.24	1.43	1.39
8	1.12		.47	.70	.93	.73	1.48	1.69	1.78	1.23	1.39	1.36
9			.46	.72	.93	.73	1.48	1.68	1.82	1.21	1.37	1.37
10			.50	.73	.93	.73	1.48	1.66	1.79	1.21	1.36	1.38
11	1.06		.49	.74	.93	.73	1.47	1.66	1.77	1.20	1.49	1.43
12		1.03	.50	.76	.95	.73	1.47	1.68	1.77	1.19	1.54	1.46
13	1.06		.48	.75	.96	.73	1.41	1.70	1.75	1.20	1.53	1.56
14			.48	.76	.96	.74	1.40	1.75	1.76	1.20	1.55	1.56
15	1.04	.87	.67	.77	.97	.71	1.45	1.77	1.74	1.29	1.58	1.53
16		.85	.74	.78	.96	.91	1.47	1.77	1.71	1.31	1.57	1.54
17		.83	.72	.79	.95	.98	1.47	1.76	1.69	1.38	1.56	1.57
18	1.04	.82	.75	.81	.95	1.09	1.46	1.76	1.67	1.46	1.56	1.60
19		.77	.77	.81	.96	1.15	1.46	1.77	1.64	1.48	1.63	1.63
20		.72	.77	.82	.96	1.17	1.43	1.75	1.61	1.49	1.63	1.67
21		.65	.76	.83	.96	1.21	1.52	1.76	1.56	1.49	1.61	1.73
22	1.07	.61	.74	.83	.95	1.26	1.65	1.76	1.51	1.47	1.56	1.72
23		.60	.72	.84	.95	1.26	1.70	1.73	1.46	1.50	1.56	1.72
24		.57	.71	.85	.94	1.22	1.74	1.71	1.43	1.50	1.58	1.72
25	1.05	.54	.70	.87	.93	1.27	1.78	1.69	1.42	1.47	1.65	1.76
26		.53	.69	.88	.92	1.28	1.82	1.68	1.41	1.50	1.86	1.84
27		.53	.68	.88	.82	1.28	1.83	1.66	1.39	1.50	1.86	1.84
28		.53	.66	.88	.75	1.28	1.75	1.66	1.39	1.47	1.85	1.83
29	.90	.55	.66	.90	.75	1.30	1.70	1.67	1.37	1.46	1.81	1.81
30		.53	.73	.90	------	1.34	1.62	1.68	1.35	1.44	1.78	1.78
31		------	.72	.91	------	1.35	------	1.64	------	1.42	1.73	------
MEAN			.61	.78	.91	.98	1.53	1.68	1.62	1.36	1.58	1.60
MAX			.77	.91	.97	1.35	1.83	1.77	1.82	1.50	1.86	1.84
MIN			.46	.66	.75	.71	1.36	1.51	1.35	1.19	1.36	1.36

05429040 Manitou Way Storm Sewer at Madison, Wis.

LOCATION.--Lat 43°02'41", long 89°26'24", in NW 1/4 NW 1/4 sec.33, T.7 N., R.9 E., Dane County, at inlet to storm sewer on Manitou Way near intersection with Mandan Crescent, in Madison.

DRAINAGE AREA.--0.23 sq mi (revised).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 840 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 62 cfs Aug. 26 (gage height, 12.88 ft); no flow many days.
Period of record: Maximum discharge, 66 cfs Apr. 12, 1971 (gage height, 12.97 ft); no flow many days in 1971-72.

REMARKS.--Records fair. Discharge at more frequent intervals is available in the district office. Data for Mallatt Storm Sewer, Knickerbocker Storm Sewer, Van Buren Storm Sewer, Marshland Creek, and Murphy Creek at Beld Street are available in the district office.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.9	0	0	0	0	.02	.49	0	0	.15	.03
2	.03	.12	0	0	0	0	.01	.16	0	0	.21	.02
3	0	0	0	0	0	.01	.08	.01	0	0	0	0
4	.07	0	0	0	0	0	.01	0	0	0	0	0
5	.01	0	.01	0	0	0	.12	.26	.07	0	0	0
6	0	0	.06	0	0	0	1.5	.18	0	0	0	0
7	0	0	0	0	0	.17	2.0	0	0	0	0	0
8	0	0	0	0	0	0	.04	0	0	0	.01	0
9	0	0	.01	0	0	.01	.63	0	0	0	.06	0
10	0	0	.36	0	0	.02	.75	0	0	0	0	0
11	0	0	0	0	0	.51	.45	0	0	0	.91	.18
12	0	0	0	0	0	.26	1.3	0	.11	.03	0	.22
13	0	0	0	0	0	.07	1.2	.35	0	0	0	.36
14	0	0	.07	0	0	.29	.24	.20	.10	.21	.75	0
15	0	0	2.7	0	.06	.45	.01	.02	0	0	0	0
16	0	0	0	0	.01	.42	.06	0	0	0	0	0
17	0	0	0	0	.02	.88	0	0	0	.60	0	[illegible]
18	0	.24	0	.15	0	.31	0	0	0	0	0	0
19	.11	0	0	.01	0	.38	0	0	0	.30	.67	.22
20	.10	0	0	.01	0	.48	0	0	0	0	.01	.57
21	.11	0	0	0	.01	.62	.97	0	0	0	0	.02
22	.19	0	0	.02	0	0	.02	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	.40	.02	0
24	0	.02	0	0	0	0	0	0	0	0	.02	0
25	0	0	0	0	0	0	0	0	0	0	1.0	.02
26	0	.03	0	0	.01	0	0	0	0	.30	.06	.47
27	.15	.05	0	0	0	0	0	0	0	0	.02	0
28	0	0	0	0	.09	0	.02	.01	.02	0	.01	.12
29	0	.04	0	0	.07	.03	.02	.05	0	0	0	0
30	.14	.02	0	0	------	.08	0	.06	0	0	0	0
31	0	------	0	0	------	.02	------	0	------	0	0	------
TOTAL	.91	2.42	3.21	.19	.27	5.01	8.85	1.88	.30	1.84	5.50	3.23
MEAN	.029	.081	.10	.006	.009	.16	.30	.061	.010	.059	.18	.11
MAX	.19	1.9	2.7	.15	.09	.88	2.0	.49	.11	.60	1.0	.02
MIN	0	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1971 TOTAL 22.96 MEAN .063 MAX 2.9 MIN 0
WTR YR 1972 TOTAL 33.61 MEAN .092 MAX 2.7 MIN 0

05429050 Nakoma Storm Sewer at Madison, Wis.

LOCATION.--Lat 43°02'55", long 89°26'16", in SE 1/4 SW 1/4 sec.28, T.7 N., R.9 E., Dane County, near the junction of Manitou Way and Nakoma Road, in the University of Wisconsin Arboretum, in Madison.

DRAINAGE AREA.--2.34 sq mi.

PERIOD OF RECORD.--December 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 865 ft (from topographic map).

EXTREMES.--December 1971 to September 1972, maximum discharge during period, 188 cfs Feb. 23 (gage height, 14.6 ft); no flow many days.

REMARKS.--Records fair. Discharge at more frequent intervals is available in the district office. Data for Mallatt Storm Sewer, Knickerbocker Storm Sewer, Van Buren Storm Sewer, Marshland Creek, Murphy Creek at Beld Street are available in the district office.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			.20	0	.08	.28	.48	3.5	0	.02	1.2	.17
2			.20	0	.05	.22	.40	2.2	0	.02	2.7	.20
3			.10	0	0	.06	.68	.72	0	.01	.46	.28
4			.10	0	0	.04	.40	.26	0	.01	.11	.21
5			.27	0	.06	.24	.82	.87	0	0	.07	.16
6			.40	0	3.4	5.4	2.1	1.9	0	0	.08	.29
7			.08	0	2.0	3.6	1.8	1.1	0	.01	.05	.15
8			.08	0	1.6	3.1	1.0	.38	0	.01	.12	.11
9			.14	0	2.1	3.7	1.6	.14	.02	.01	.05	.10
10			3.9	0	1.6	21	2.8	.11	.01	.01	.04	.08
11			1.5	0	0	10	1.6	.08	.01	.01	7.3	.82
12			.39	0	0	3.6	.57	.05	.38	.08	1.3	.77
13			.10	0	.20	1.1	.44	.98	.02	.01	.35	2.5
14			.13	0	.80	2.6	1.1	3.1	.54	.55	4.3	.50
15			16	0	.42	3.6	1.3	1.4	.03	.01	2.7	.21
16			4.2	0	.27	5.7	.94	.33	.01	.01	.65	.15
17			1.4	0	.25	25	.41	.15	.01	2.2	.23	.67
18			.35	.20	.04	13	.26	.08	.01	.08	.17	.12
19			.12	.10	.38	6.2	.16	.04	.02	.64	4.7	.58
20			.05	0	1.7	4.4	.16	.04	.01	.03	1.6	3.3
21			.03	.30	.24	5.9	6.0	.04	.01	.03	.47	5.0
22			.04	.20	1.8	2.8	4.8	.04	.01	.02	.18	1.8
23			.04	.07	.67	.79	1.3	.05	.01	1.4	8.4	.39
24			.03	.07	1.5	.56	.18	.05	.01	.03	8.6	.17
25			.04	.10	3.4	.43	.14	.05	.01	.02	5.5	2.3
26			.04	.01	.04	.36	.11	.06	.01	.93	11	7.5
27			.08	.25	0	.38	.08	.05	.01	.04	2.2	2.4
28			.10	.27	.48	.36	.14	.06	.03	.04	.57	1.0
29			0	0	.67	.43	.20	.33	.01	.04	.18	.46
30			0	0	------	.62	.07	.13	.01	.02	.13	.24
31		------	0	.30	------	.48	------	0	------	.02	.11	------
TOTAL			30.11	1.87	23.75	125.95	32.04	18.29	1.19	6.31	65.52	32.63
MEAN			.97	.06	.82	4.06	1.07	.59	.040	.20	2.11	1.09
MAX			16	.30	3.4	25	6.0	3.5	.54	2.2	11	7.5
MIN			0	0	0	.04	.07	0	0	0	.04	.08

05429120 Lake Wingra Outlet at Madison, Wis.

LOCATION.--Lat 43°03'28", long 89°24'22", in NE 1/4 NE 1/4 sec.27, T.7 N., R.9 E., Dane County, at outlet of Lake Wingra in Madison.

DRAINAGE AREA.--6.04 sq mi.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 846.8 ft above mean sea level and 1.2 ft above city of Madison datum.

EXTREMES.--October 1970 to September 1971, maximum discharge during period, 24 cfs Apr. 13 (gage height, 1.40 ft); no flow many days in October, July, August, and September.

Current year: Maximum discharge, 25 cfs Aug. 26 (gage height, 1.41 ft); no flow Oct. 1 to Nov. 1 and June 1 to Aug. 11.

Period of record: Maximum discharge, 25 cfs Aug. 26, 1972 (gage height, 1.41 ft); no flow many days in 1971-72.

REMARKS.--Records fair. Water from Lake Wingra lagoons bypasses gage through a 30 inch storm sewer. The following flows were measured:

Date	Discharge (cfs)
June 2, 1972	0.56
July 3	.45
Oct. 20	.71

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	2.4	1.3	.77	6.9	7.5	3.8	.52	.56	0	.10
2	0	.05	2.4	1.2	.95	6.0	7.1	2.9	2.0	.10	0	.08
3	0	.08	2.1	1.9	1.0	5.5	6.6	2.6	2.2	0	0	.10
4	0	.44	1.3	3.9	1.3	5.1	6.0	2.7	2.3	0	0	.09
5	0	.44	.95	3.3	1.9	4.9	5.7	2.7	2.4	0	0	.22
6	0	.65	.02	2.8	1.9	5.3	5.5	2.4	2.6	0	0	.71
7	0	.44	.08	2.4	1.7	4.8	4.8	2.2	2.7	0	0	.40
8	0	.20	.20	2.3	1.8	4.1	4.3	2.2	1.8	2.6	0	.22
9	0	.95	.89	2.4	1.8	3.5	3.5	2.0	1.6	2.2	0	.06
10	0	1.2	.40	2.2	1.8	3.2	2.9	1.8	1.2	1.7	0	.06
11	0	1.6	3.1	1.9	1.7	2.6	2.9	1.6	.22	1.1	0	0
12	0	1.2	3.1	1.6	1.6	2.6	4.8	1.0	.36	.95	0	0
13	0	.95	3.1	1.8	1.2	3.2	18	1.2	.56	.95	0	0
14	0	.95	3.1	1.8	1.3	5.3	18	1.0	.52	.44	.23	0
15	0	.65	3.1	1.2	1.3	7.5	15	1.1	.25	.44	.06	0
16	0	.65	3.1	1.2	1.3	9.4	14	.56	.09	.20	.02	0
17	0	.44	2.9	1.2	1.4	8.4	14	.56	.08	.07	.01	0
18	0	.44	2.8	1.8	1.7	8.9	11	1.0	.02	.03	.02	0
19	0	.44	2.6	1.6	4.9	12	10	1.7	0	.01	.02	0
20	0	1.8	2.4	1.7	7.7	11	9.9	.56	2.3	0	.01	0
21	0	2.1	2.1	2.0	10	9.9	8.4	.20	1.4	0	0	0
22	0	2.8	2.1	1.9	12	8.4	7.8	.20	1.3	0	0	0
23	0	1.2	2.0	1.7	12	7.1	7.1	.20	3.3	0	1.2	0
24	0	1.6	1.6	1.6	9.4	6.2	5.8	.77	2.7	0	1.6	0
25	0	1.8	1.6	1.5	8.2	5.7	5.7	1.7	3.5	0	2.3	0
26	0	2.1	1.6	1.2	8.4	5.5	3.6	.77	3.1	0	1.5	0
27	0	1.8	1.4	.77	9.1	5.7	4.1	.83	2.9	0	.89	0
28	0	1.8	1.2	.89	7.8	6.9	5.5	1.0	2.2	0	.56	0
29	.02	2.1	1.1	1.0	------	6.9	4.3	.77	1.7	0	.40	0
30	.05	2.1	1.2	.71	------	7.3	4.1	.46	1.2	0	.15	0
31	.05	------	1.2	.60	------	7.8	------	.28	------	0	.12	------
TOTAL	.12	32.99	57.14	53.47	115.92	197.6	227.9	42.76	47.02	11.35	9.09	2.04
MEAN	.004	1.10	1.84	1.72	4.14	6.37	7.60	1.38	1.57	.37	.29	.068
MAX	.05	2.8	3.1	3.9	12	12	18	3.8	3.5	2.6	2.3	.71
MIN	0	.02	.02	.60	.77	2.6	2.9	.20	0	0	0	0

WTR YR 1971 TOTAL 797.40 MEAN 2.18 MAX 18 MIN 0

05429120 Lake Wingra Outlet at Madison, Wis.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	2.1	3.3	1.9	2.1	6.4	8.4			0	6.9
2		.01	2.6	3.2	1.8	2.4	5.7	8.2			0	4.8
3		.09	1.5	3.1	1.8	2.3	5.3	7.1			0	3.6
4		.02	1.0	3.1	1.6	2.9	4.9	6.6			0	3.1
5		.06	1.1	2.9	1.6	2.8	5.3	7.3			0	2.4
6		.05	1.1	2.9	1.6	2.8	5.3	8.0			0	1.9
7		.01	1.1	2.9	1.6	3.1	6.0	8.0			0	1.3
8		.01	1.2	2.8	1.6	2.7	6.0	6.9			0	1.0
9		.01	2.3	2.7	1.6	2.3	6.0	6.0			0	.65
10		.01	3.1	2.7	1.6	2.1	6.4	6.0			0	.48
11		.01	2.6	2.6	1.6	3.1	6.9	5.7			0	1.3
12		.01	2.1	2.6	1.7	5.1	6.9	5.3			.02	1.0
13		.01	2.0	2.4	1.7	6.2	7.3	5.3			.08	4.8
14		.03	2.7	2.3	1.6	6.9	6.9	7.8			.95	4.1
15		.01	16	2.2	1.8	7.3	8.0	8.0			2.4	3.5
16		.01	17	2.2	1.7	13	8.9	7.8			3.1	3.1
17		.02	14	2.1	2.1	14	8.9	6.9			2.9	2.9
18		.13	12	2.6	2.1	18	8.0	6.0			1.9	2.9
19		.48	11	2.9	1.7	19	6.0	4.9			3.6	3.2
20		.52	8.9	2.9	1.5	18	6.0	4.9			4.1	4.1
21		.56	7.3	2.8	1.7	18	6.9	3.6			3.5	6.9
22		.60	5.5	2.7	1.3	16	14	2.4			3.2	5.7
23		.65	5.1	2.6	1.6	14	13	1.8			2.8	4.9
24		.77	4.9	2.4	1.8	11	12	1.2			6.2	4.4
25		.89	4.8	2.2	1.9	9.9	9.9	.65			7.3	6.6
26		1.0	4.6	2.1	1.6	8.4	8.4	.20			23	12
27		1.2	4.3	2.0	1.6	8.7	7.8	.02			20	11
28		1.4	3.9	2.0	1.8	8.4	7.3	.02			18	9.4
29		1.6	3.6	2.0	1.7	8.4	6.9	.02			13	7.5
30		1.8	3.5	1.9	------	8.4	6.4	.01			11	6.1
31		------	3.5	1.9	------	8.2	------	.01	------		8.4	------
TOTAL	0	11.98	156.5	79.0	49.2	255.5	223.7	145.03	0	0	135.45	131.53
MEAN	0	.40	5.05	2.55	1.70	8.24	7.46	4.68	0	0	4.37	4.38
MAX	0	1.8	17	3.3	2.1	19	14	8.4	0	0	23	12
MIN	0	0	1.0	1.9	1.3	2.1	4.9	.01	0	0	0	.48

CAL YR 1971 TOTAL 875.63 MEAN 2.40 MAX 18 MIN 0
WTR YR 1972 TOTAL 1,187.89 MEAN 3.25 MAX 23 MIN 0

05429500 Yahara River near McFarland, Wis.

LOCATION.--Lat 43°00'32", long 89°18'18", in SW 1/4 sec.3, T.6 N., R.10 E., Dane County, on left bank just upstream from bridge on U.S. Highway 51, at dam at outlet of Lake Waubesa and 1.0 mile southwest of McFarland.

DRAINAGE AREA.--323 sq mi.

PERIOD OF RECORD.--September 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above mean sea level (levels by Wisconsin Department of Natural Resources). Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 146 cfs (6.14 inches per year).

EXTREMES.--Current year: Maximum discharge, 325 cfs Apr. 16 (gage height, 4.32 ft); maximum gage height, 4.77 ft June 2 (backwater from aquatic vegetation and construction in river channel; minimum daily discharge, 16 cfs Oct. 11-12.

Period of record: Maximum discharge, 867 cfs Apr. 10, 1959 (gage height, 5.82 ft); maximum gage height, 6.33 ft July 23, 24, 1950 (backwater from aquatic vegetation); minimum discharge, 1.0 cfs Oct. 18, 1964.

REMARKS.--Records fair. Flow regulated by dams at outlets of Lake Mendota and Lake Waubesa. The Madison Metropolitan Sewerage District diverted an average of 30.27 million gallons per day of effluent into the Badfish Creek basin during 1972. Prior to 1958 the effluent was discharged into the Yahara River above McFarland.

REVISIONS.--WSP 805, WRD Wis. 1971: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	45	116	130	140	130	288	242	41	33	37	188
2	28	82	112	130	140	130	290	255	70	33	42	181
3	26	89	110	130	140	130	292	158	100	33	44	174
4	25	84	105	130	140	130	295	84	105	34	45	161
5	23	70	103	125	140	125	298	73	110	33	46	154
6	20	59	105	125	140	125	302	75	116	33	48	149
7	21	56	105	125	140	125	315	120	120	33	50	125
8	20	48	105	125	140	125	318	149	120	33	47	95
9	19	43	105	125	140	120	320	145	120	33	41	89
10	18	89	116	125	140	120	318	142	105	32	41	86
11	16	138	120	125	140	130	320	147	103	31	48	89
12	16	131	120	125	145	140	318	140	103	29	54	95
13	17	129	120	125	145	160	318	145	110	28	54	118
14	18	120	120	130	145	150	310	161	114	31	53	116
15	18	116	135	130	145	150	318	172	114	38	56	120
16	20	114	150	130	145	170	320	161	112	39	54	120
17	25	112	31	130	145	210	320	149	105	38	46	118
18	26	114	28	130	145	238	320	131	88	41	46	118
19	25	125	150	130	140	240	315	120	86	40	49	125
20	25	136	155	130	140	240	258	120	72	41	49	133
21	28	131	150	130	140	245	133	105	78	37	50	156
22	28	122	150	130	140	252	129	112	73	36	48	163
23	32	108	145	130	135	255	140	125	67	37	46	158
24	41	112	145	135	135	252	147	114	48	37	50	152
25	50	110	140	135	135	250	149	103	48	37	72	152
26	48	108	140	135	130	252	198	95	53	41	127	163
27	47	116	140	135	130	252	270	93	54	41	140	168
28	42	112	135	140	130	255	308	64	37	40	165	172
29	38	118	135	140	130	270	315	59	33	38	198	177
30	38	116	130	140	------	280	302	54	37	38	198	188
31	35	------	130	140	------	285	------	67	------	37	188	------
TOTAL	863	3,053	3,751	4,045	4,040	5,936	8,244	3,880	2,542	1,105	2,232	4,203
MEAN	27.8	102	121	130	139	191	275	125	84.7	35.6	72.0	140
MAX	50	138	155	140	145	285	320	255	120	41	198	188
MIN	16	43	28	125	130	120	129	54	33	28	37	86
CFSM	.09	.32	.37	.40	.43	.59	.85	.39	.26	.11	.22	.43
IN.	.10	.35	.43	.47	.47	.68	.95	.45	.29	.13	.26	.48

CAL YR 1971 TOTAL 41,758.4 MEAN 114 MAX 386 MIN 6.5 CFSM .35 IN 4.81
WTR YR 1972 TOTAL 43,894.0 MEAN 120 MAX 320 MIN 16 CFSM .37 IN 5.06

05430500 Rock River at Afton, Wis.

LOCATION.--Lat 42°36'33", long 89°04'14", in NE 1/4 sec.28, T.2 N., R.12 E., Rock County, on right bank in Afton, 0.3 mile downstream from highway bridge and 1.1 miles upstream from Bass Creek.

DRAINAGE AREA.--3,331 sq mi.

PERIOD OF RECORD.--January 1914 to current year. Monthly discharge only for January 1914, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 742.36 ft above mean sea level. Prior to Aug. 21, 1932, a nonrecording gage, and Aug. 21, 1932, to Sept. 30, 1933, water-stage recorder, at same site at datum 1 ft higher.

AVERAGE DISCHARGE.--58 years, 1,688 cfs (6.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,170 cfs Sept. 30 (gage height, 7.76 ft); minimum daily, 255 cfs Oct. 6.

Period of record: Maximum discharge, 13,000 cfs Mar. 23, 24, 1929 (gage height, 11.81 ft, present datum); maximum gage height observed, 13.05 ft, Feb. 5, 1916, present datum (backwater from ice); minimum discharge, 22 cfs Sept. 9, 1964; minimum daily, 42 cfs Aug. 25, 26, 1934; minimum gage height, 0.09 ft Aug. 26, 1934.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation caused by powerplants above station. Records of water temperature for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1238: 1916(M), 1919(M), 1933, 1937-38, 1943. WRD Wis. 1971: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Jan. 1 to Mar. 11.)

2.1	212	5.0	2,220
2.5	420	6.0	3,160
3.0	740	7.0	4,210
4.0	1,440	8.0	5,480

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	567	943	1,600	740	860	3,960	4,330	1,650	522	950	2,600
2	301	768	992	1,500	700	860	4,060	4,350	1,470	782	1,070	2,620
3	301	782	971	1,350	300	760	4,080	4,320	700	706	1,070	2,520
4	306	638	978	1,300	380	720	3,970	4,250	740	685	1,270	2,380
5	296	706	992	1,250	370	780	3,960	4,160	999	651	1,190	2,160
6	255	599	992	1,250	370	660	3,970	4,000	845	645	1,140	2,130
7	301	592	943	1,250	380	540	4,040	4,200	852	625	1,070	2,070
8	348	768	992	1,200	390	900	3,860	4,390	803	645	645	2,090
9	364	775	1,060	1,200	420	840	3,740	4,320	922	658	605	2,000
10	381	775	1,170	1,200	450	840	3,750	4,110	1,560	706	658	1,850
11	364	796	1,200	1,150	480	960	3,740	4,010	1,410	645	901	1,830
12	316	817	1,270	1,100	520	1,660	3,750	3,920	1,220	605	1,050	1,870
13	348	894	1,350	1,050	500	1,600	3,690	4,080	999	740	1,100	2,110
14	359	880	1,360	980	500	1,410	3,700	4,200	978	838	1,110	2,040
15	280	775	2,290	960	490	1,560	3,750	3,870	957	1,240	1,370	1,830
16	381	824	2,400	960	500	1,830	4,000	3,740	1,060	1,270	1,720	1,820
17	522	880	2,140	1,000	490	2,360	3,980	3,630	1,090	1,360	1,760	1,910
18	444	873	2,100	1,050	480	3,050	3,750	3,300	1,050	1,800	1,790	2,140
19	420	789	2,410	1,000	500	2,910	3,840	3,220	1,010	1,830	1,870	2,280
20	338	586	2,110	960	520	3,010	3,850	3,210	1,020	1,710	1,910	2,570
21	398	775	2,040	940	520	3,170	3,960	3,030	1,110	1,660	1,860	3,240
22	426	880	2,110	920	370	3,320	4,060	2,700	1,120	1,520	1,900	3,580
23	450	978	2,030	920	450	3,400	3,800	2,240	1,080	1,420	1,950	3,800
24	529	726	1,960	900	500	3,530	3,890	2,180	1,080	1,480	1,890	4,070
25	491	845	1,960	860	540	3,630	4,000	2,160	999	1,390	2,090	4,430
26	444	859	1,890	860	620	3,690	3,960	2,530	964	1,360	2,340	4,670
27	541	838	1,880	840	640	3,670	4,060	2,350	901	1,380	2,270	4,840
28	504	838	1,710	820	640	3,640	4,080	2,150	908	1,290	2,350	4,950
29	554	1,080	1,750	820	640	3,810	4,070	1,990	651	1,200	2,640	5,130
30	638	1,020	1,880	800	------	3,770	4,040	1,940	306	1,130	2,710	5,140
31	579	------	1,720	780	------	3,860	------	1,860	------	1,060	2,630	------
TOTAL	12,532	23,923	49,593	32,770	14,400	67,600	117,360	104,740	30,454	33,553	48,879	86,670
MEAN	404	797	1,600	1,057	497	2,181	3,912	3,379	1,015	1,082	1,577	2,889
MAX	638	1,080	2,410	1,600	740	3,860	4,080	4,390	1,650	1,830	2,710	5,140
MIN	255	567	943	780	300	540	3,690	1,860	306	522	605	1,820
CFSM	.12	.24	.48	.32	.15	.65	1.17	1.01	.30	.32	.47	.87
IN.	.14	.27	.55	.37	.16	.75	1.31	1.17	.34	.37	.55	.97

CAL YR 1971 TOTAL 586,669 MEAN 1,607 MAX 5,880 MIN 250 CFSM .48 IN 6.55
WTR YR 1972 TOTAL 622,474 MEAN 1,701 MAX 5,140 MIN 255 CFSM .51 IN 6.95

05431500 Turtle Creek near Clinton, Wis.

LOCATION.--Lat 42°35'47", long 88°51'50", in SE 1/4 sec.29, T.2 N., R.14 E., Rock County, on left bank 15 ft downstream from bridge on State Highway 140, 2.7 miles north of Clinton, 11 miles northeast of Beloit, and 16 miles upstream from mouth.

DRAINAGE AREA.--202 sq mi.

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 817.00 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--33 years, 105 cfs (7.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,570 cfs Sept. 18 (gage height, 7.29 ft); minimum, 26 cfs Dec. 2 (gage height, 2.30 ft), result of freezeup.

Period of record: Maximum discharge, 6,560 cfs Feb. 24, 1949 (gage height, 10.22 ft); maximum gage height, 10.27 ft Feb. 20, 1971 (backwater from ice); minimum discharge, 8 cfs Dec. 29, 1956 (gage height, 2.04 ft), result of freezeup.

Maximum stage known, 12.09 ft in February 1938, from floodmarks (discharge, 10,700 cfs, from rating curve extended above 5,500 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Some seasonal regulation caused by dams used to maintain levels of Turtle and Delavan Lakes.

REVISIONS (WATER YEARS).--WSP 955: 1940. WSP 1308: 1950(M). WRD Wis. 1971: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Nov. 7, 8, 22, 23, Nov. 30 to Dec. 5, Dec. 18-23, 26-31, Jan. 3 to Mar. 15.)

2.4	38	4.0	469
2.6	66	5.0	918
3.0	142	6.0	1,460
3.5	282	7.0	2,280

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	84	60	144	43	150	87	153	85	68	102	223
2	45	114	56	128	43	90	92	157	84	77	776	214
3	58	86	54	120	44	110	97	161	79	78	626	156
4	60	71	54	110	43	90	99	174	78	72	323	133
5	53	64	56	100	42	70	111	152	78	70	235	124
6	53	58	61	90	42	80	171	150	79	68	223	118
7	74	56	75	84	43	100	141	176	75	70	269	118
8	73	54	97	82	43	160	121	279	74	69	323	127
9	55	55	108	80	43	120	109	429	72	70	330	120
10	55	56	164	76	43	90	104	375	76	69	306	114
11	52	54	226	70	44	110	108	352	72	68	382	206
12	50	54	198	64	45	200	105	272	75	68	334	313
13	50	53	169	60	46	160	110	200	75	77	192	1.250
14	50	52	144	58	45	140	112	189	81	110	166	996
15	48	50	382	54	44	160	145	253	125	569	192	523
16	49	51	363	52	44	296	648	214	100	266	164	421
17	49	51	260	50	45	809	861	200	90	263	144	410
18	49	54	300	50	45	976	453	152	86	932	129	1.740
19	52	59	320	50	46	345	413	133	82	445	135	928
20	61	57	270	49	47	285	382	120	96	394	131	617
21	56	55	220	49	47	269	417	112	97	352	122	1.240
22	55	54	180	49	47	232	856	106	86	323	122	828
23	55	53	150	48	48	223	498	94	80	282	116	539
24	55	52	134	47	48	212	410	87	77	195	154	494
25	68	57	119	45	48	198	367	85	76	133	253	457
26	86	54	110	44	49	156	306	84	74	124	986	453
27	98	59	100	43	50	104	206	82	72	138	445	417
28	104	57	92	42	60	91	152	82	71	127	256	382
29	106	60	100	42	100	93	145	85	73	116	241	494
30	101	62	210	42	------	91	139	95	71	106	226	296
31	91	------	170	42	------	85	------	93	------	104	214	------
TOTAL	1.957	1.796	5.002	2.064	1.377	6.295	7.965	5.296	2.439	5.903	8.617	14.451
MEAN	63.1	59.9	161	66.6	47.5	203	266	171	81.3	190	278	482
MAX	106	114	382	144	100	976	861	429	125	932	986	1.740
MIN	45	50	54	42	42	70	87	82	71	68	102	114
CFSM	.31	.30	.80	.33	.24	1.01	1.32	.85	.40	.94	1.38	2.39
IN.	.36	.33	.92	.38	.25	1.16	1.47	.98	.45	1.09	1.59	2.66

CAL YR 1971 TOTAL 46.485 MEAN 127 MAX 2.370 MIN 45 CFSM .63 IN 8.56
WTR YR 1972 TOTAL 63.162 MEAN 173 MAX 1.740 MIN 42 CFSM .86 IN 11.63

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-17	0100	5.93	1,420	9-18	1500	7.29	2,570
9-13	1800	6.42	1,770	9-21	1500	6.06	1,500

05432500 Pecatonica River at Darlington, Wis.

LOCATION.--Lat 42°40'40", long 90°07'07", in NE 1/4 sec.3, T.2 N., R.3 E., Lafayette County, on right bank in Darlington, 0.3 mile downstream from Vinegar Branch, and 3.6 miles upstream from Otter Creek.

DRAINAGE AREA.--274 sq mi.

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 802.42 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 176 cfs (8.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,830 cfs Mar. 17 (gage height, 11.57 ft); minimum, 50 cfs Dec. 28 (gage height, 1.58 ft), result of freezeup.

Period of record: Maximum discharge, 22,000 cfs July 16, 1950 (gage height, 20.71 ft), from rating curve extended above 11,000 cfs on basis of slope-area determination of peak flow; minimum, 17 cfs Nov. 29, 1966 (gage height, 2.09 ft), result of freezeup; minimum gage height, 1.07 ft Dec. 6, 1968, result of freezeup.

Flood of Feb. 21, 1937, reached a stage of 17.6 ft from floodmarks.

REMARKS.--Records good except those for winter periods, which are fair.

Rating tables (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Dec. 2-4, 19, Jan. 2-5, Jan. 13 to Mar. 14.)

Oct. 1 to Mar. 19				Mar. 20 to Sept. 30			
1.5	45	7.0	720	1.5	48	5.0	447
2.0	82	9.0	1,070	2.0	92	7.0	720
3.0	187	11.0	1,620	2.5	144	9.0	1,070
5.0	447	12.0	2,000	3.0	200	11.0	1,620

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	103	64	97	76	300	116	175	101	76	159	152
2	73	531	62	90	76	160	122	180	98	78	422	180
3	76	233	64	80	76	110	128	184	96	77	321	135
4	79	112	70	76	74	96	124	161	93	70	163	121
5	73	98	80	72	74	86	118	151	90	68	131	116
6	72	91	87	74	74	80	161	195	97	68	140	112
7	71	73	95	78	74	100	167	247	92	68	220	111
8	72	87	95	80	74	150	137	228	87	70	157	115
9	73	86	102	93	74	110	136	198	89	74	133	108
10	73	86	123	112	74	100	163	178	90	74	117	102
11	72	85	148	104	76	200	176	164	85	70	134	196
12	71	83	125	86	78	800	153	154	84	76	154	217
13	71	82	101	80	78	1,100	144	155	154	110	128	294
14	72	80	95	70	80	1,000	142	186	105	94	115	387
15	71	79	325	60	82	1,170	153	214	107	455	108	219
16	70	78	553	54	84	1,660	234	179	94	252	105	188
17	70	79	208	50	84	1,740	246	156	84	128	103	174
18	70	98	132	90	84	1,760	183	145	83	175	98	169
19	82	113	120	300	84	977	165	133	83	126	95	168
20	126	93	151	150	84	515	154	129	87	104	180	188
21	96	85	125	120	84	420	180	124	86	95	328	188
22	84	75	112	100	84	545	427	121	81	86	134	159
23	79	80	113	90	84	226	314	116	76	89	115	144
24	78	80	113	82	84	168	238	112	73	92	109	142
25	77	80	105	78	84	151	205	109	73	85	151	195
26	77	83	104	74	84	141	183	107	74	84	525	414
27	77	88	101	74	84	132	168	107	73	106	238	318
28	77	85	65	74	84	128	158	102	74	95	167	243
29	75	86	100	74	100	130	168	103	87	84	143	288
30	82	86	98	74	------	128	162	124	89	80	130	232
31	88	------	102	76	------	117	------	111	------	77	122	------
TOTAL	2,402	3,198	3,938	2,812	2,332	14,500	5,325	4,748	2,685	3,286	5,345	5,775
MEAN	77.5	107	127	90.7	80.4	468	178	153	89.5	106	172	193
MAX	126	531	553	300	100	1,760	427	247	154	455	525	414
MIN	70	73	62	50	74	80	116	102	73	68	95	102
CFSM	.28	.39	.46	.33	.29	1.71	.65	.56	.33	.39	.63	.70
IN.	.33	.43	.53	.38	.32	1.97	.72	.64	.36	.45	.73	.78

CAL YR 1971 TOTAL 57,966 MEAN 159 MAX 1,880 MIN 62 CFSM .58 IN 7.87
WTR YR 1972 TOTAL 56,346 MEAN 154 MAX 1,760 MIN 50 CFSM .56 IN 7.65

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

05433000 East Branch Pecatonica River near Blanchardville, Wis.

LOCATION.--Lat 42°47'10", long 89°51'40", in SE 1/4 sec.26, T.4 N., R.5 E., Lafayette County, on left bank at downstream side of bridge on State Highway 78, 1.8 miles south of Blanchardville and 4.5 miles upstream from Sawmill Creek.

DRAINAGE AREA.--221 sq mi.

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 796.8 ft above mean sea level, unadjusted. Prior to Dec. 20, 1939, nonrecording gage at bridge 50 ft upstream at same datum. Auxiliary nonrecording gage 2.7 miles upstream at same datum read every six hours or more often when stages exceed 10 ft.

AVERAGE DISCHARGE.--33 years, 134 cfs (8.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,380 cfs Mar. 18 (gage height, 11.85 ft); minimum daily, 66 cfs Jan. 15.

Period of record: Maximum discharge, 11,700 cfs Feb. 28, 1948 (gage height, 15.74 ft); minimum, 18 cfs Nov. 29, 1966.

REMARKS.--Records good except those for winter periods, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 2-5, 29, Jan. 3 to Mar. 16.)

2.9	64	7.0	420
3.0	71	8.0	520
4.0	150	9.0	632
5.0	230	10.0	760
6.0	320	11.0	990
		12.0	1,470

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	86	77	107	72	130	108	149	104	75	79	100
2	72	363	72	90	72	90	112	167	103	74	117	106
3	85	173	76	80	72	94	114	182	101	74	105	96
4	83	104	82	76	72	82	114	147	98	73	80	94
5	75	96	88	75	72	80	108	146	96	73	76	94
6	73	92	89	72	72	80	160	165	96	72	77	95
7	74	92	94	96	72	95	164	199	95	72	78	94
8	74	85	94	100	74	100	111	174	93	72	76	94
9	75	86	101	100	74	78	120	157	92	71	75	94
10	74	87	123	94	76	76	116	145	91	71	78	94
11	74	85	155	86	76	120	120	137	90	71	105	115
12	72	84	115	80	78	460	118	132	90	70	151	118
13	72	83	102	74	78	660	120	138	92	81	95	158
14	73	83	96	70	78	450	130	176	87	72	86	167
15	72	81	254	66	76	560	129	185	89	241	84	116
16	72	80	300	70	76	700	159	154	84	113	84	108
17	72	82	140	80	74	1,230	178	139	83	88	84	104
18	72	84	156	98	74	684	139	131	81	115	84	103
19	74	108	141	150	74	552	132	124	81	84	100	115
20	96	92	141	100	74	412	126	119	79	79	111	143
21	79	87	120	88	72	417	147	117	79	78	132	132
22	78	80	99	80	72	172	354	114	78	78	92	114
23	75	83	104	78	72	145	221	111	78	81	87	105
24	74	83	102	76	72	132	177	109	78	78	92	105
25	74	83	96	74	74	129	160	107	77	75	97	173
26	74	86	97	74	76	124	148	107	77	77	315	349
27	76	91	96	74	78	120	140	106	76	90	162	216
28	75	85	94	74	84	120	134	104	75	79	122	158
29	73	90	100	74	98	120	137	104	78	77	109	170
30	78	87	111	74	------	110	133	110	75	77	101	148
31	81	------	113	74	------	116	------	106	------	77	97	------
TOTAL	2,350	2,981	3,670	2,605	2,184	8,439	4,329	4,261	2,596	2,608	3,231	3,878
MEAN	75.8	99.4	118	84.0	75.3	272	144	137	86.5	84.1	104	129
MAX	96	363	300	150	98	1,230	354	199	104	241	315	349
MIN	72	80	72	66	72	76	108	104	75	70	75	94
CFSM	.34	.45	.53	.38	.34	1.23	.65	.62	.39	.38	.47	.58
IN.	.40	.50	.62	.44	.37	1.42	.73	.72	.44	.44	.54	.65

CAL YR 1971 TOTAL 44,282 MEAN 121 MAX 885 MIN 64 CFSM .55 IN 7.45
WTR YR 1972 TOTAL 43,132 MEAN 118 MAX 1,230 MIN 66 CFSM .53 IN 7.26

PEAK DISCHARGE (BASE, 1,300 CFS).--Mar. 18 (1600) 1,380 cfs (11.85 ft).

05434500 Pecatonica River at Martintown, Wis.

LOCATION.--Lat 42°30'34", long 89°47'58", in SE 1/4 sec.32, T.1 N., R.6 E., Green County, on right bank about 400 ft downstream from highway bridge in Martintown, 0.3 mile upstream from Wisconsin-Illinois State line and 8.8 miles downstream from Skinner Creek.

DRAINAGE AREA.--1,034 sq mi.

RECORDS AVAILABLE.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 757.9 ft above mean sea level. Prior to Jan. 6, 1940, nonrecording gage at same site and datum. Auxiliary nonrecording gage 1.2 miles downstream read several times daily during high water.

AVERAGE DISCHARGE.--33 years, 674 cfs (8.85 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,970 cfs Mar. 20 (gage height, 14.23 ft); minimum daily, 280 cfs Jan. 24 to Feb. 13.
Period of record: Maximum discharge, 15,100 cfs July 1, 1969 (gage height, 21.46 ft); no flow for part of Dec. 14, 1939.

REMARKS.--Records good except those for winter periods, which are fair.

REVISIONS (WATER YEARS).--WSP 1308: 1949-50(M). WRD Wis. 1971: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second). (Stage-discharge relation affected by ice Dec. 3-6, 19-23, Dec. 29 to Mar. 16.)

3.0	256	7.0	1,160
3.5	343	9.0	1,710
4.0	440	11.0	2,280
5.0	660	13.0	3,160
		15.0	4,660

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	362	355	460	280	1,400	506	808	498	380	339	594
2	304	514	337	400	280	1,300	495	874	473	368	1,120	613
3	301	901	320	370	280	1,000	501	875	436	354	1,520	645
4	333	887	320	360	280	700	507	844	438	350	1,110	586
5	337	562	320	360	280	520	514	815	428	328	708	543
6	318	432	350	380	280	440	622	840	428	336	572	523
7	307	383	405	400	280	580	726	1,010	428	328	804	515
8	304	359	413	420	280	960	695	1,290	420	327	848	505
9	306	351	426	430	280	1,000	604	1,250	418	327	668	510
10	307	357	474	440	280	740	589	1,030	426	328	561	488
11	303	382	573	420	280	750	635	893	422	340	592	543
12	312	349	588	340	280	1,300	632	814	414	328	851	762
13	305	403	528	350	280	1,700	604	780	452	339	824	2,550
14	305	399	458	330	290	1,900	583	847	492	374	650	2,700
15	307	388	670	320	300	2,400	700	928	506	437	551	2,310
16	304	367	1,220	330	300	3,000	1,230	922	460	569	510	1,580
17	303	373	1,300	400	310	3,550	1,860	835	430	754	484	1,130
18	295	386	862	570	310	3,520	1,400	744	400	583	465	1,080
19	311	417	560	400	310	3,700	977	682	393	550	466	937
20	332	449	540	350	320	3,940	806	636	389	491	564	1,020
21	373	421	550	320	320	3,680	789	604	409	413	1,030	1,410
22	383	376	500	310	320	2,720	1,150	579	396	381	979	1,220
23	354	363	500	290	330	1,980	1,380	556	387	362	705	942
24	334	359	485	280	330	1,300	1,280	536	371	372	609	839
25	325	373	477	290	330	815	1,030	517	363	384	618	786
26	332	343	461	280	330	671	880	496	361	364	1,120	950
27	328	393	446	280	330	606	795	496	360	385	1,410	1,440
28	325	401	398	280	330	571	738	481	363	403	1,180	1,440
29	326	397	410	280	660	555	714	477	376	391	838	1,910
30	333	381	440	280	------	546	702	473	382	366	694	1,810
31	338	------	460	280	------	530	------	494	------	348	618	------
TOTAL	9,955	12,917	16,146	11,040	9,060	48,374	24,644	23,426	12,519	12,360	24,008	32,881
MEAN	321	431	521	356	312	1,560	821	756	417	399	774	1,096
MAX	383	901	1,300	570	660	3,940	1,860	1,290	506	754	1,520	2,700
MIN	295	351	320	280	280	440	495	473	360	327	339	488
CFSM	.31	.41	.50	.34	.30	1.50	.79	.73	.40	.38	.74	1.05
IN.	.36	.46	.58	.39	.32	1.73	.88	.84	.45	.44	.86	1.18

CAL YR 1971 TOTAL 235,079 MEAN 644 MAX 4,200 MIN 270 CFSM .62 IN 8.41
WTR YR 1972 TOTAL 237,330 MEAN 648 MAX 3,940 MIN 280 CFSM .62 IN 8.49

PEAK DISCHARGE (BASE, 4,000 CFS).--No peaks above the base.

05436500 Sugar River near Brodhead, Wis.

LOCATION.--Lat 42°36'42", long 89°23'53", in SW 1/4 sec.26, T.2 N., R.9 E., Green County, on left bank at downstream side of highway bridge, 1.2 miles southwest of Brodhead, and 1.9 miles upstream from Sylvester Creek.

DRAINAGE AREA.--530 sq mi.

PERIOD OF RECORD.--January 1914 to current year. Monthly discharge only for January and February 1914, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 768.14 ft above mean sea level. Prior to Oct. 17, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--58 years, 333 cfs (8.53 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs Mar. 13 (gage height, 5.23 ft); minimum, 127 cfs Jan. 4 (gage height, 0.24 ft), result of freezeup.

Period of record: Maximum discharge, 14,800 cfs Sept. 13, 1915 (gage height, 11.4 ft, from floodmarks, from rating curve extended above 7,500 cfs; minimum, 35 cfs Sept. 19, 1959 (gage height, -0.16 ft).

REMARKS.--Records good except those for winter periods, which are fair.

REVISIONS (WATER YEARS).--WSP 1238: 1914-16, 1918, 1922, 1927, 1933. WSP 1508: 1916-17(M), 1919(M), 1920, 1921(M), 1927-28(M), 1930(M), 1931, 1936(M), 1943(M). WRD Wis. 1971: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 1-5, Dec. 12-17, Jan. 2 to Mar. 11.)

0.3	138	2.0	561
.6	197	3.0	912
1.0	280	4.0	1,270
1.5	409	5.0	1,630

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	204	221	276	160	250	280	597	271	210	241	334
2	172	263	180	250	160	500	278	633	266	215	412	319
3	171	403	180	200	160	400	280	568	251	197	438	302
4	172	441	170	180	160	330	281	518	241	193	426	288
5	174	364	180	170	160	290	282	454	241	191	331	279
6	174	285	200	180	160	250	318	441	241	188	298	272
7	171	244	220	200	160	240	407	520	242	188	285	272
8	173	227	226	230	170	450	487	712	234	187	289	260
9	173	222	244	240	170	350	440	776	232	188	260	266
10	173	219	267	250	170	370	365	624	230	186	251	260
11	175	237	330	280	170	410	341	481	226	185	287	307
12	171	246	402	260	170	758	343	398	225	187	383	374
13	174	214	421	220	180	1.570	339	381	230	204	507	594
14	173	211	341	180	180	1.500	341	457	240	222	448	644
15	171	208	320	150	180	1.350	347	547	240	329	333	549
16	170	203	537	140	190	1.200	567	574	231	398	315	433
17	168	202	600	150	190	1.380	799	500	223	323	311	365
18	171	197	660	170	190	1.600	830	386	217	388	293	376
19	189	211	500	190	190	1.630	619	338	214	508	293	340
20	204	224	400	210	190	1.500	442	324	215	463	321	349
21	185	220	370	240	200	1.110	418	320	215	384	373	543
22	190	209	340	230	200	826	747	285	211	285	377	686
23	192	199	295	210	200	645	913	290	202	261	351	695
24	191	200	246	200	200	466	925	287	197	276	298	558
25	188	201	278	190	200	371	577	280	197	312	419	408
26	186	201	273	180	200	325	444	273	197	270	536	405
27	187	213	271	170	200	305	392	268	195	282	624	477
28	183	213	252	160	210	292	364	264	197	330	732	606
29	183	218	234	160	220	302	354	276	211	301	598	941
30	190	217	270	160	------	296	354	308	224	250	404	579
31	195	------	286	160	------	288	------	284	------	246	342	------
TOTAL	5.566	7.116	9,754	6.186	5.290	21.554	13.874	13.364	6.756	8.347	11.776	13.081
MEAN	180	237	315	200	182	695	462	431	225	269	380	436
MAX	204	441	660	280	220	1.630	925	776	271	508	732	941
MIN	168	197	170	140	160	240	278	264	195	185	241	260
CFSM	.34	.45	.59	.38	.34	1.31	.87	.81	.42	.51	.72	.82
IN.	.39	.50	.68	.43	.37	1.51	.97	.94	.47	.59	.83	.92

CAL YR 1971 TOTAL 112,510 MEAN 308 MAX 1.800 MIN 142 CFSM .58 IN 7.90
WTR YR 1972 TOTAL 122,664 MEAN 335 MAX 1.630 MIN 140 CFSM .63 IN 8.61

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-13	1400	5.23	1,720	3-19	0200	5.06	1,650

05437500 Rock River at Rockton, Ill.

LOCATION.--Lat 42°27'05", long 89°04'20", in SE 1/4 NW 1/4 sec.24, T.46 N., R.1 E., Winnebago County, on left bank at upstream side of bridge on State Highway 2 in Rockton, 0.8 mile downstream from Pecatonica River.

DRAINAGE AREA.--6,361 sq mi (revised).

PERIOD OF RECORD.--June 1903 to July 1906, October 1906 to March 1909, July 1914 to September 1919, October 1939 to current year. Published as "below mouth of Pecatonica River at Rockton" 1903-09; as "at Rockford" 1914-19. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 707.94 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1906, nonrecording gage at same site at datum about 1 ft higher. Oct. 1, 1906, to Mar. 31, 1909, nonrecording gage at same site at datum about 2 ft higher. July 30, 1914, to Apr. 30, 1919, nonrecording gage at site at Rockford about 21 miles downstream, at different datum.

AVERAGE DISCHARGE.--40 years (1903-5, 1914-19, 1939-72), 3,658 cfs (7.81 inches per year), discharge for site at Rockford adjusted for difference in drainage area.

EXTREMES.--Current year: Maximum discharge, 12,200 cfs Sept. 19 (gage height, 8.78 ft); minimum daily, 1,010 cfs Oct. 16.

Period of record: Maximum discharge, 32,500 cfs Mar. 30, 1916 (gage height, 13.06 ft, site and datum then in use); minimum daily, 501 cfs Sept. 14, 1958.

Flood in February 1937 reached a stage of 14.6 ft (backwater from ice), from painted floodmark.

REMARKS.--Records good except those for winter periods, which are poor. Low flow regulated by powerplants above station.

REVISIONS (WATER YEARS).--WSP 325: 1903-9. WSP 895: 1904(M). WSP 1508: 1915, 1916-17(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.550	3.590	1.840	2.500	5.800
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.300	3.570	2.130	3.660	5.460
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.840	2.560	2.190	5.030	5.140
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.930	2.340	2.120	5.400	4.910
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.740	2.050	5.440	4.490
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.190	2.690	1.920	5.230	4.420
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.440	2.480	1.890	4.880	4.280
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.630	2.370	1.790	4.370	4.240
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.700	2.460	1.900	3.890	4.130
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.500	3.260	1.860	3.740	3.920
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.500	3.240	1.920	3.750	4.050
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.200	3.140	1.680	4.230	4.520
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.510	2.890	2.080	4.110	6.410
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.570	2.930	2.290	4.080	9.480
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.620	3.470	3.850	4.200	8.950
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.140	3.530	4.520	4.480	8.630
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.940	3.300	4.140	4.270	9.230
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.380	3.040	4.990	4.120	11.700
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.690	2.810	5.080	4.250	11.800
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.620	2.820	4.740	4.800	10.500
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.060	2.780	4.320	5.150	11.100
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.800	[illegible]	2.680	4.020	4.950	11.200
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.750	2.710	3.590	4.820	10.200
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.620	2.520	3.410	4.730	9.920
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.360	2.530	3.180	5.050	9.780
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.740	2.420	3.140	7.950	9.560
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.550	8.390	4.500	2.370	3.160	7.850	9.190
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.770	4.280	2.270	3.110	7.370	9.060
29	[illegible]	[illegible]	[illegible]	[illegible]	2.100	[illegible]	7.320	4.000	2.240	3.030	7.590	9.930
30	[illegible]	[illegible]	[illegible]	2.100	------	5.120	7.130	4.060	1.680	2.830	7.360	10.400
31	[illegible]	------	[illegible]	1.440	------	[illegible]	------	3.990	------	2.700	6.560	------
TOTAL	37.350	54.850	100.170	74.570	41.780	199.140	229.420	224.290	83.430	91.470	155.830	232.600
MEAN	1.205	1.828	3.231	2.405	1.441	6.425	7.647	7.235	2.781	2.951	5.027	7.753
MAX	1.420	2.410	5.370	3.430	2.100	10.300	10.800	10.700	3.590	5.080	7.950	11.800
MIN	1.010	1.410	1.700	1.470	1.080	2.690	5.930	3.990	1.680	1.680	2.500	3.920
CFSM	.19	.29	.51	.38	.23	1.01	1.20	1.14	.44	.46	.79	1.22
IN.	.22	.32	.59	.44	.24	1.16	1.34	1.31	.49	.53	.91	1.36

CAL YR 1971 TOTAL 1.325.507 MEAN 3.632 MAX 17.200 MIN 695 CFSM .57 IN 7.75
WTR YR 1972 TOTAL 1.524.990 MEAN 4.167 MAX 11.800 MIN 1.010 CFSM .66 IN 8.92

05527800 Des Plaines River at Russell, Ill.

LOCATION.--Lat 42°29'22", long 87°55'32", in SE 1/4 sec.3, T.46 N., R.11 E., Lake County, at center on downstream side of bridge on Russell Road, 0.3 mile west of Russell, 7.2 miles upstream from Mill Creek, and at mile 109.14.

DRAINAGE AREA.--124 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961-63, and annual maximum stages, water years 1962-1966, June 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 662.00 ft above mean sea level. Oct. 17, 1961 to June 29, 1967, crest-stage gage at left downstream side of bridge at datum 4.29 ft higher.

AVERAGE DISCHARGE.--5 years, 79.9 cfs (8.75 inches per year).

EXTREMES.--Current year: Maximum discharge, 816 cfs Apr. 19 (gage height, 8.10 ft); maximum gage height, 9.40 ft Sept. 22; minimum discharge, 1.0 cfs Oct. 23.

Period of record: Maximum discharge, 898 cfs Feb. 23, 1971 (gage height, 8.61 ft); maximum gage height, 9.40 ft Sept. 22, 1972; no flow at times most years.

Maximum stage since 1938, 9.69 ft, present datum, in April 1960, from floodmark.

REMARKS.--Records good except those for winter periods, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.1	7.6	80	2.5	41	104	255	20	103	60	288
2	1.4	2.2	7.2	70	2.8	45	114	223	18	64	71	260
3	1.7	3.2	5.9	55	3.0	44	118	202	18	44	128	225
4	2.3	3.4	4.5	50	2.4	39	117	181	21	32	164	188
5	2.2	4.0	4.2	44	2.4	33	117	157	22	25	187	149
6	2.0	3.2	4.0	38	2.6	26	114	147	17	21	203	110
7	2.8	3.1	4.0	41	2.5	25	118	161	13	20	208	81
8	2.7	3.0	4.4	25	2.5	27	128	207	12	19	201	76
9	2.0	2.5	5.0	20	2.4	31	128	254	9.5	19	183	77
10	1.7	2.5	13	25	2.3	32	124	283	7.5	17	156	70
11	1.7	2.3	45	23	2.3	35	117	297	7.5	15	126	107
12	1.4	2.3	72	20	2.5	70	114	288	7.5	14	122	229
13	2.1	1.4	71	18	2.7	46	137	266	7.8	17	128	343
14	1.5	1.4	55	13	3.3	40	156	239	10	40	132	438
15	1.5	2.5	75	7.0	4.1	73	254	212	61	189	165	484
16	1.8	2.4	145	6.5	5.9	120	442	188	150	285	227	518
17	2.5	2.7	171	7.3	9.2	246	710	162	227	324	281	531
18	2.4	2.4	172	8.4	12	330	790	137	280	366	306	578
19	1.6	2.7	175	7.6	11	435	809	111	312	390	316	647
20	1.3	2.7	162	6.8	9.5	450	758	87	340	411	313	706
21	1.5	2.3	133	6.0	8.7	430	667	69	354	413	301	745
22	1.3	2.7	98	5.0	9.2	405	662	57	356	402	283	763
23	1.1	2.0	67	5.4	8.9	385	646	46	352	381	260	744
24	1.3	1.9	57	6.1	8.3	365	635	38	340	359	241	703
25	2.4	1.9	50	5.3	7.8	335	604	32	325	335	220	652
26	1.4	2.1	45	4.4	7.4	303	550	26	299	306	257	599
27	2.3	2.6	42	3.7	7.9	240	486	22	269	277	301	545
28	2.1	3.1	39	3.1	12	185	415	19	235	241	316	494
29	2.0	4.3	33	2.6	23	142	348	19	196	200	321	483
30	2.5	6.2	49	2.4	------	117	296	19	152	154	319	460
31	2.2	------	76	2.5	------	102	------	21	------	102	308	------
TOTAL	60.4	82.5	1,891.8	623.1	182.7	5,247	10,778	4,425	4,438.8	5,585	6,804	12,293
MEAN	1.95	2.75	61.0	20.1	6.30	171	359	143	148	180	219	410
MAX	2.9	6.2	175	80	23	450	809	297	356	413	321	763
MIN	1.1	1.4	4.0	2.4	2.3	25	104	19	7.5	14	60	70
CFSM	.02	.02	.49	.16	.05	1.38	2.90	1.15	1.19	1.45	1.77	3.31
IN.	.02	.02	.57	.19	.05	1.59	3.23	1.33	1.33	1.68	2.04	3.69

CAL YR 1971 TOTAL 25,379.48 MEAN 69.5 MAX 853 MIN .24 CFSM .56 IN 7.61
WTR YR 1972 TOTAL 52,461.30 MEAN 143 MAX 809 MIN 1.1 CFSM 1.15 IN 15.74

05543830 Fox River at Waukesha, Wis.

LOCATION.--Lat 43°00'17", long 88°14'37", in SW 1/4 sec.3, T.6 N., R.18 E., Waukesha County, on left bank 20 ft downstream from Prairie Street bridge in Waukesha, 1.0 mile downstream from dam and 3.2 miles downstream from Pewaukee River.

DRAINAGE AREA.--127 sq mi.

PERIOD OF RECORD.--January 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 793.04 ft above mean sea level (levels by city of Waukesha).

AVERAGE DISCHARGE.--9 years, 70.7 cfs (7.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,150 cfs Sept. 18 (gage height, 6.06 ft); minimum, 9.0 cfs May 31 (gage height, 1.72 ft).

Period of record: Maximum discharge, 1,240 cfs Mar. 6, 1965 (gage height, 5.79 ft); minimum, 3.0 cfs Jan. 1, 1964 (gage height, 1.52 ft), Sept. 18, 19, 1971 (gage height, 1.54 ft).

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation from mill dam one mile upstream.

Rating table (gage height, in feet, and discharge, in cubic feet per second).
(Stage-discharge relation affected by ice Dec. 29 to Jan. 1, Jan. 9-31, Feb. 6-18.)

1.8	13	3.0	162
2.0	27	4.0	395
2.5	81	5.0	705
		6.0	1,120

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	41	29	68	27	47	138	216	39	42	48	188
2	13	85	23	66	29	38	150	260	56	48	81	158
3	23	76	21	60	29	44	142	253	81	47	80	136
4	15	40	21	51	29	39	142	246	79	44	74	120
5	15	31	24	46	30	40	138	222	69	44	63	111
6	15	27	31	40	28	34	146	209	61	46	61	99
7	14	21	41	39	27	69	160	205	55	52	66	95
8	13	20	54	41	26	79	137	216	48	46	74	85
9	13	22	63	42	26	79	129	214	45	45	76	81
10	13	21	162	45	25	53	126	193	42	44	75	74
11	14	21	216	43	25	79	126	166	41	43	116	117
12	15	21	182	40	26	166	122	144	93	42	131	87
13	15	19	140	38	27	166	128	133	108	46	126	150
14	15	18	116	35	29	116	135	124	118	69	131	191
15	15	18	264	33	30	160	142	124	133	101	121	193
16	15	18	337	32	31	110	154	122	133	114	123	139
17	15	18	300	31	32	211	186	118	107	122	114	150
18	15	30	258	31	33	286	176	110	88	129	103	544
19	60	24	224	30	33	350	158	100	76	144	106	707
20	48	24	170	30	35	419	144	91	69	144	94	815
21	38	21	144	29	36	538	150	82	62	128	90	979
22	25	17	119	28	35	588	242	77	58	111	84	1,010
23	20	19	104	27	35	470	279	72	56	101	118	926
24	20	18	95	27	35	400	242	51	53	89	144	795
25	20	17	88	27	34	330	207	61	50	79	194	659
26	19	21	81	27	32	267	178	56	48	77	243	558
27	19	24	77	26	32	207	158	51	46	69	291	485
28	19	24	64	26	43	184	142	46	45	65	280	449
29	19	31	62	26	48	166	129	47	45	60	257	427
30	21	28	56	26	------	113	121	91	44	54	234	411
31	18	------	60	27	------	142	------	34	------	50	206	------
TOTAL	612	815	3,626	1,137	907	5,990	4,727	4,134	2,048	2,295	4,004	10,939
MEAN	19.7	27.2	117	36.7	31.3	193	158	133	68.3	74.0	129	365
MAX	60	85	337	68	48	588	279	260	133	144	291	1,010
MIN	13	17	21	26	25	34	121	34	39	42	48	74
CFSM	.16	.21	.92	.29	.25	1.52	1.24	1.05	.54	.58	1.02	2.87
IN.	.18	.24	1.06	.33	.27	1.75	1.38	1.21	.60	.67	1.17	3.20

CAL YR 1971 TOTAL 31,143.6 MEAN 85.3 MAX 601 MIN 4.2 CFSM .67 IN 9.12
WTR YR 1972 TOTAL 41,234.0 MEAN 113 MAX 1,010 MIN 13 CFSM .89 IN 12.08

05545000 North Lake near Elkhorn, Wis.

LOCATION.--Lat 42°44'38", long 88°37'45", in SE 1/4 sec.5, T.3 N., R.16 E., Walworth County, attached to post in lake near end of road at south end of lake, 6.5 miles northwest of Elkhorn.

DRAINAGE AREA.--1 sq mi, approximately. Area of North Lake, 350 acres, approximately, at high stage.

PERIOD OF RECORD.--May 1937 to current year (fragmentary). Published as Holden Lake prior to October 1958.

GAGE.--Nonrecording gage read about once weekly or more often except during winter. Altitude of gage is 900 ft (from topographic map).

EXTREMES.--Current year: Maximum gage height observed, 9.95 ft May 13; minimum observed, 8.68 ft Oct. 2.
Period of record: Maximum gage height observed, 12.45 ft Mar. 25, 1939; lake dry for parts of period July to December 1958.

REMARKS.--Lake has no surface outlet. Lake ice covered Nov. 27 to Apr. 15.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										9.45		
2	8.68											9.60
3									9.65			
4												
5											9.45	
6		8.79						9.77				
7												
8					9.16					9.40		
9	8.71										9.43	9.45
10									9.58			
11												
12											9.45	
13		8.74						9.95				
14												
15										9.50		
16	8.69											9.65
17									9.48			
18												
19								9.87			9.55	
20		8.76						9.87				
21												
22							9.87			9.53		
23	8.71											9.80
24									9.53			
25												
26											9.60	9.80
27								9.69				
28												
29			9.10				9.77		9.45	9.50		
30	8.71				------	9.65						9.83
31		------			------		------		------			------

05545550 Rockland Lake near Burlington, Wis.

LOCATION.--Lat 42°40'34", long 88°14'57", in NE 1/4 SE 1/4 sec.33, T.3 N., R.19 E., Racine County, about 0.8 mile east of Burlington at Camp MacLean.

DRAINAGE AREA.--0.99 sq mi. Area of Rockland Lake, 45 acres.

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 758 ft (from topographic map).

EXTREMES.--Current year: Maximum gage height observed, 5.14 ft Sept. 22; minimum observed, 4.47 ft Oct. 16. Period of record: Maximum gage height observed, 5.58 ft July 30, 1969; minimum gage height, 4.49 ft Sept. 22, 1971.

REMARKS.--Lake ice covered Nov. 30 to Dec. 12 and from Dec. 18 to Apr. 12.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2									4.94			
3											4.93	
4			4.62	4.65								
5							5.00			4.66		
6		4.61						4.94				
7	4.54											
8												
9			4.64									4.87
10									4.93		4.81	
11							5.02					
12												
13		4.57		4.70				4.96				
14										4.66		5.12
15												
16	4.47										4.87	
17			4.68						4.91			
18						5.04						
19				4.75						4.91		
20		4.51						4.95				
21												
22			4.65									
23	4.51								4.79			5.14
24						5.06						
25										4.81		
26											5.06	5.18
27		4.62						4.94				
28			4.63	4.77								
29							5.00					
30	4.59				------				4.70			
31		------			------	5.02	------		------		4.96	------

05546500 Fox River at Wilmot, Wis.

LOCATION.--Lat 42°30'40", long 88°10'45", in SW 1/4 sec.30, T.1 N., R.20 E., Kenosha County, on right bank 100 ft downstream from bridge on County Trunk C, 300 ft upstream from Wilmot Dam, 1.0 mile north of Wisconsin-Illinois State line, and 6.0 miles upstream from Fox chain of lakes.

DRAINAGE AREA.--868 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 735.22 ft above mean sea level. Prior to Sept. 1, 1956, nonrecording gage and concrete dam.

AVERAGE DISCHARGE.--33 years, 464 cfs (7.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,280 cfs Sept. 23 (gage height, 7.65 ft); minimum daily, 138 cfs Oct. 27.

Period of record: Maximum discharge, 7,520 cfs Mar. 31, 1960 (gage height, 9.25 ft, from graph based on gage readings); no flow part of day Oct. 26, 1945; minimum daily discharge, 35 cfs Sept. 9, 1958.

REMARKS.--Records good except those for winter periods, which are fair. Three 6-foot lift gates in Wilmot Dam were in operation during the year; discharge through gates computed by weir and orifice formulas and added to flow over dam.

REVISIONS (WATER YEARS).--WSP 1308: 1943(M), 1945(M). WRD Wis. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	196	227	813	210	410	1,130	1,060	254	285	307	927
2	142	265	209	734	200	486	1,040	1,080	251	281	665	872
3	158	369	213	656	190	505	1,020	1,050	254	327	1,100	834
4	182	369	218	250	180	499	989	1,070	255	317	1,090	798
5	182	334	218	340	170	410	950	1,030	250	294	919	762
6	174	312	213	460	170	368	934	997	250	272	813	694
7	174	318	182	390	180	378	958	1,080	249	263	769	613
8	158	275	196	380	190	643	950	1,230	245	263	749	595
9	154	260	236	383	200	722	911	1,400	243	259	619	602
10	166	251	400	383	210	669	834	1,520	241	259	613	590
11	154	251	745	387	220	613	850	1,470	231	259	572	676
12	142	251	752	394	220	715	828	1,370	260	255	820	973
13	146	246	712	370	210	934	828	1,200	318	281	688	1,230
14	146	232	654	260	200	1,040	834	1,090	334	362	707	1,680
15	146	213	754	250	200	1,110	865	1,080	769	936	842	1,870
16	146	209	1,330	250	200	1,110	1,100	1,080	813	1,100	865	1,770
17	154	204	1,400	270	200	1,230	1,820	1,020	682	950	813	1,580
18	154	200	1,030	290	210	1,960	2,190	950	584	1,230	755	1,670
19	154	204	712	290	200	2,320	2,070	820	474	1,360	749	2,180
20	246	213	896	281	200	2,010	1,880	777	663	1,270	783	2,580
21	286	232	1,010	263	190	1,820	1,620	734	904	1,140	749	2,780
22	302	213	1,020	263	190	1,810	1,620	676	749	973	688	3,060
23	291	178	989	250	200	1,830	1,880	613	619	820	694	3,250
24	270	166	1,000	250	200	1,770	1,940	556	528	715	950	3,250
25	270	170	911	220	200	1,740	1,810	533	465	644	1,020	3,120
26	182	182	865	190	206	1,720	1,620	507	363	572	1,080	2,970
27	138	204	798	180	206	1,610	1,430	465	337	556	1,300	2,970
28	166	213	591	180	213	1,430	1,280	404	332	539	1,320	2,650
29	191	232	501	180	290	1,270	1,180	404	327	496	1,230	2,640
30	191	251	722	190	------	1,260	1,120	391	317	381	1,100	2,700
31	191	------	820	200	------	1,150	------	261	------	255	966	------
TOTAL	5,714	7,213	20,524	10,197	5,855	35,542	38,481	27,918	12,561	17,914	26,335	52,886
MEAN	184	240	662	329	202	1,147	1,283	901	419	578	850	1,763
MAX	302	369	1,400	813	290	2,320	2,190	1,520	904	1,360	1,320	3,250
MIN	138	166	182	180	170	368	828	261	231	255	307	590
CFSM	.21	.28	.76	.38	.23	1.32	1.48	1.04	.48	.67	.98	2.03
IN.	.24	.31	.88	.44	.25	1.52	1.65	1.20	.54	.77	1.13	2.27

CAL YR 1971 TOTAL 195,786 MEAN 536 MAX 2,900 MIN 117 CFSM .62 IN 8.39
WTR YR 1972 TOTAL 261,140 MEAN 713 MAX 3,250 MIN 138 CFSM .82 IN 11.19

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site. Measurements have been made at numerous other stations throughout the State since 1961. These measurements are published in preceding Water Resources Data for Wisconsin publications.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Streams tributary to Lake Superior				
04024350	Black River near Chaffey, Wis.	S 1/2 sec.19, T.46 N., R.14 W., at bridge on State Highway 35, 4.0 miles southeast of Patzau.	d53.6	1964 1967 1969-72	10-14-71	37.8
04025000	Amnicon River near Poplar, Wis.	On common boundary of secs.29 and 32, T.48 N., R.12 W., at bridge on U.S. Highway 2, 4.5 miles northwest of Poplar.	112	1964 1967 1969-72	10-14-71	58.1
04025100	Middle River near Poplar, Wis.	SE 1/4 sec.12, T.48 N., R.12 W., at bridge on State Highway 13, 4.6 miles north of Poplar.	51.6	1964 1967 1969-72	10-14-71	22.6
04026030	Reefer Creek near Port Wing, Wis.	NW 1/4 sec.4, T.49 N., R.9 W., at bridge on State Highway 13, 5.8 miles southwest of Port Wing.	d10.9	1964 1967 1969-72	10-13-71	4.14
04026120	Flag River at Port Wing, Wis.	Center of sec.28, T.50 N., R.8 W., at bridge on State Highway 13, just northeast of Port Wing.	d33.9	1964 1967 1969-72	10-13-71	30.1
04026190	Sand River near Red Cliff, Wis.	NE 1/4 sec.14, T.51 N., R.5 W., at bridge on State Highway 13, 8.5 miles northwest of Red Cliff.	28.2	1964 1967 1969-72	10-14-71	5.23
*04026300	Sioux River near Washburn, Wis.	NE 1/4 sec.35, T.49 N., R.5 W., at twin concrete box culvert on County Trunk C, 2.25 miles west of Washburn.	d35.2	1962-64 b1964-66 c1967-72	10-14-71	9.10
04026350	North Fish Creek near Ashland, Wis.	SW 1/4 sec.2, T.47 N., R.5 W., at bridge on U.S. Highway 2, 3.0 miles west of Ashland.	d88.1	1967 1969-72	10-14-71 8-15-72	82.1 86.4
*04026400	Spillerberg Creek near Cayuga, Wis.	NW 1/4 sec.21, T.43 N., R.2 W., at concrete culvert pipe on State Highway 13, 4.25 miles southeast of Cayuga.	a6.18	1961-67 1969-72	10-14-71	4.05
04026500	Bad River at Mellen, Wis.	NW 1/4 sec.6, T.44 N., R.2 W., at State Highway 13 at Mellen.	d105	1948-55≠ 1969-72	10- 6-71 10-14-71 11-10-71 7-12-72	114 58.6 72.9 23.9
04026550	Tyler Forks River near Upson, Wis.	SE 1/4 sec.28, T.45 N., R.1 W., at culvert on State Highway 77, 4.3 miles southwest of Upson.	41.3	1967 1969-72	10-13-71 8-15-72	27.7 24.8

* Also a crest-stage station.
≠ Operated as a continuous-record gaging station.
a Approximately.
b Operated as a seasonal continuous-record gaging station.
c Operated as a seasonal continuous-record gaging station without records being published.
d Revised.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Streams tributary to Lake Superior--Continued				
04026600	Marengo River near Marengo, Wis.	NW 1/4 sec.36, T.46 N., R.4 W., at bridge on State Highway 13, 0.2 mile north of Marengo.	a101	1967 1969-72	10-14-71 12-13-71 8-15-72	53.3 74.4 55.4
04026650	Trout Brook near Highbridge, Wis.	SW 1/4 sec.8, T.45 N., R.3 W., at culvert on State Highway 13, 1.9 miles west of Highbridge.	d8.60	1967 1969-72	10-14-71 8-15-72	2.08 5.91
04026900	Potato River near Gurney, Wis.	SW 1/4 sec.16, T.46 N., R.1 W., at bridge on State Highway 169, 0.7 mile south of Gurney.	a92.7	1967 1969-72	10-13-71 8-15-72	53.0 33.5
04027200	Pearl Creek at Grand View, Wis.	SE 1/4 NE 1/4 sec.22, T.45 N., R.6 W., at bridge at U.S. Highway 63, 0.8 mile east of Grand View.	16.9	1961-70 1972	10-14-71 12-13-71	9.57 13.4
04027900	Layman Creek near Hurley, Wis.	NE 1/4 sec.6, T.44 N., R.3 E., at bridge on U.S. Highway 51, 8.0 miles southeast of Montreal.	a17.8	1967 1969-72	10-12-71 10-13-71 8-14-72	10.9 12.3 11.6
*04029700	Boomer Creek near Saxon, Wis.	N 1/2 sec.3, T.46 N., R.1 E., at concrete culvert pipe on U.S. Highway 2, 3.0 miles east of Saxon.	d5.94	1961-64 1966-69 1970-72	10-13-71	1.57
		Streams tributary to Lake Michigan				
04060990	Montagne Creek near Florence, Wis.	SE 1/4 SW 1/4 sec.11, T.40 N., R.17 E., at town road, 4.8 miles northwest of Florence.	14.4	1969-70 1972	8-11-72	5.98
04063690	South Branch Popple River near Fence, Wis.	SW 1/4 NE 1/4 sec.25, T.38 N., R.15 E., at U.S. Forest Service Road 2159, 6.5 miles west of Fence.	10.2	1969 1972	7-31-72	7.42
04065970	South Branch Pemebowon River near Pembine, Wis.	SE 1/4 SE 1/4 sec.19, T.37 N., R.20 E., at County Trunk O, 2.8 miles northwest of Pembine.	26.6	1969-70 1972	8- 2-72	8.40
04066250	South Branch Pike River near Dunbar, Wis.	NE 1/4 SE 1/4 sec.36, T.36 N., R.18 E., at town road, 6.9 miles south of Dunbar.	72.4	1969-70 1972	8- 2-72	33.2
04067700	North Branch Peshtigo River near Argonne, Wis.	NW 1/4 SW 1/4 sec.24, T.37 N., R.13 E., at U.S. Forest Service Road 2387, 2.9 miles northeast of Argonne.	32.4	1969 1972	8- 1-72	6.76
04067750	Camp Eight Creek near Cavour, Wis.	NE 1/4 NE 1/4 sec.36, T.37 N., R.14 E., at County Trunk G, 2.3 miles west of Cavour.	15.0	1969 1972	8- 1-72	4.04
04067900	Rat River near Wabeno, Wis.	SE 1/4 sec.28, T.35 N., R.16 E., at bridge on U.S. Forest Service Road 2134, 8.0 miles northeast of Wabeno.	82.6	1969-70 1972	8- 2-72	47.1
04067990	Eagle Creek near Athelstene, Wis.	On common boundary of secs.24 and 25, T.34 N., R.18 E., at bridge on County Trunk C, 4.5 miles southwest of Athelstene.	38.6	1969-70 1972	8- 2-72	16.2
04068100	North Fork Thunder River near Lakewood, Wis.	NE 1/4 sec.23, T.33 N., R.17 E., at culvert on U.S. Forest Service Road 2101, 9.7 miles northeast of Lakewood.	20.0	1969-70 1972	8- 2-72	11.2
04069350	South Branch Beaver Creek near Beaver, Wis.	SW 1/4 NE 1/4 sec.28, T.31 N., R.20 E., at U.S. Highway 141, 0.5 mile south of Beaver.	53.9	1969 1972	8- 4-72	24.3

* Also a crest-stage station.
a Approximately.
d Revised.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Streams tributary to Lake Michigan--Continued				
04069390	Little Peshtigo River near Coleman, Wis.	SE 1/4 SW 1/4 sec.18, T.30 N., R.21 E., at County Trunk B, 1.9 miles east of Coleman.	49.9	1969 1972	8- 3-72	12.2
04070100	North Branch Oconto River near Mountain, Wis.	On common boundary of secs.23 and 26, T.31 N., R.16 E., at bridge on U.S. Forest Service Road 2106, 3.2 miles north of Mountain.	178	1969-70 1972	8- 2-72	123
04070300	Waupee River near Mountain, Wis.	SW 1/4 sec.30, T.31 N., R.17 E., at bridge on State Highway 32, 4.2 miles southeast of Mountain.	47.9	1969-70 1972	8- 3-72	29.6
04070600	Hills Pond Creek near Langlade, Wis.	SE 1/4 sec.4, T.31 N., R.15 E., at bridge on State Highway 64, 5.5 miles east of Langlade.	9.15	1969-70 1972	8- 3-72	12.0
04070800	Pecore Creek near Hayes, Wis.	NE 1/4 sec.8, T.29 N., R.17 E., at culvert on country road, 1.2 miles northwest of Hayes.	30.4	1969-70 1972	8- 3-72	18.3
04071730	Kelly Brook near Lena, Wis.	SE 1/4 NW 1/4 sec.22, T.29 N., R.20 E., at U.S. Highway 141, 1.5 miles north of Lena.	79.6	1969 1972	8- 3-72	16.5
04072000	Suamico River at Suamico, Wis.	NW 1/4 sec.22, T.25 N., R.20 E., at bridge on County Trunk B, 0.5 mile west of Suamico, 7.5 miles north of Green Bay and 3 miles upstream from mouth.	57.0	1969 1972	7-27-72	3.70
04076400	Little West Branch near Neopit, Wis.	NW 1/4 sec.11, T.29 N., R.14 E., at culvert on County Trunk M, 3.8 miles northeast of Neopit.	21.1	1969-70 1972	8- 2-72	11.4
04078490	Mill Creek near Pella, Wis.	NW 1/4 sec.12, T.26 N., R.14 E., at bridge on country road, 2.8 miles east of Pella.	23.1	1969-70 1972	8- 3-72	11.5
04078800	Bear Creek near Sugar Bush, Wis.	SE 1/4 sec.5, T.23 N., R.15 E., at bridge on country road, 1.9 miles northeast of Sugar Bush.	26.3	1969-70 1972	8- 1-72	.53
04079600	Little Wolf River at Galloway, Wis.	SW 1/4 SW 1/4 sec.23, T.26 N., R.10 E., at State Highway 49, 0.2 mile north of Galloway.	22.5	1962-67 1972	7-17-72 7-25-72	9.04 6.01
04083000	West Branch Fond du Lac River at Fond du Lac, Wis.	NE 1/4 NE 1/4 sec.20, T.15 N., R.17 E., at County Trunk T, 2.0 miles southwest of downtown Fond du Lac.	84.5	1939-54≠ 1972	11-17-71	7.28
04083500	East Branch Fond du Lac River at Fond du Lac, Wis.	NE 1/4 SW 1/4 sec.22, T.15 N., R.17 E., at County Trunk VV, 1.4 miles south of downtown Fond du Lac.	77.9	1939-54≠ 1962-67 1972	11-17-71	5.87
04085070	Ashwaubenon Creek near De Pere, Wis.	On common boundary of land grants 28 and 29, T.23 N., R.20 E., at culverts on County Trunk G, 0.5 mile west of De Pere.	25.2	1969-70 1972	7-26-72	.40
04085110	East River near De Pere, Wis.	SE 1/4 sec.3, T.22 N., R.20 E., at bridge on State Highway 32, 2.5 miles south of De Pere.	58.4	1969-70 1972	7-26-72	.68
04085170	Hibbard Creek at Jacksonport, Wis.	SE 1/4 sec.14, T.29 N., R.27 E., at culvert on State Highway 57, 0.8 mile northeast of Jacksonport.	22.5	1969-70 1972	7-20-72	2.16

≠ Operated as a continuous-record gaging station.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Streams tributary to Lake Michigan--Continued						
04059800	Brule Creek at Alvin, Wis.	NW 1/4 sec.34, T.41 N., R.13 E., at bridge on Forest Service Road 2458, 1.6 miles northwest of Alvin.	37	1969-72	7-31-72	21.7
04063600	Pine River near Three Lakes, Wis.	NW 1/4 sec.30, T.39 N., R.13 E., at bridge on U.S. Forest Service Road 2182, 12.4 miles northeast of Three Lakes.	16.2	1966 1969-72	7-31-72	9.63
04069480	Trout Creek near Peshtigo, Wis.	On common boundary of secs.23 and 24, T.30 N., R.22 E., at bridge, 1.5 miles west of Peshtigo.	24.3	1969-72	8-13-72	.94
*04071800	Pensaukee River near Pulaski, Wis.	NE 1/4 sec.1, T.26 N., R.18 E., at bridge on State Highway 32, 6.1 miles north of Pulaski.	43.2	1961 1963-67 1969 1972	7-27-72	.81
04078055	Black Creek at Black Creek, Wis.	NE 1/4 sec.8, T.23 N., R.17 E., at bridge on State Highway 47, 0.3 mile north of Black Creek.	55.9	1969-72	8- 1-72	.11
04078080	Bear Creek at Stephensville, Wis.	NE 1/4 sec.20, T.22 N., R.16 E., at bridge on State Highway 76, at Stephensville.	59.4	1969-72	7-31-72	.92
04078600	North Branch Pigeon River near Marion, Wis.	NE 1/4 sec.5, T.25 N., R.13 E., at farm bridge, 2.8 miles west of Marion.	10.8	1969-72	8- 1-72	3.18
*04081000	Waupaca River near Waupaca, Wis.	On north line of sec.1, T.21 N., R.12 E., on right bank 10 ft downstream from highway bridge, 4.0 miles upstream from Weyauwega Lake dam, 4.5 miles southeast of Waupaca.	272	1962-64 [b]1964-66 [c]1966-70 1972	8- 3-72	177
04085390	South Branch Manitowoc River near Chilton, Wis.	NW 1/4 sec.17, T.18 N., R.20 E., at bridge on country road, 1.1 miles northeast of Chilton.	75.2	1969-72	7-17-72	8.66
*04085400	Killsnake River near Chilton, Wis.	E 1/2 sec.6, T.18 N., R.20 E., at bridge on country road, 2.4 miles northeast of Chilton.	29.5	1963-67 1969-72	7-17-72	3.18

* Also a crest-stage station.

[b] Operated as a seasonal continuous-record gaging station.

[c] Operated as a seasonal continuous-record gaging station without records being published.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Streams tributary to Lake Michigan--Continued						
04085180	Stoney Creek near Algoma, Wis.	NW 1/4 sec.5, T.25 N., R.26 E., at bridge on County Trunk U, 5.5 miles northeast of Algoma.	24.8	1969-70 1972	7-20-72	2.43
04085190	Silver Creek near Algoma, Wis.	NE 1/4 sec.19, T.25 N., R.25 E., at bridge on County Trunk D, 3.5 miles northwest of Algoma.	58.0	1969-70 1972	7-20-72	4.08
04085280	East Twin River at Mishicot, Wis.	NW 1/4 sec.4, T.20 N., R.24 E., at bridge on State Highway 147, at Mishicot.	109	1969-70 1972	7-19-72	14.5
04085330	West Twin River near Francis Creek, Wis.	SW 1/4 sec.7, T.20 N., R.24 E., at bridge on County Trunk Q, 2.3 miles northeast of Francis.	146	1969-70 1972	7-19-72	18.6
04085410	Mud Creek near Reedsville, Wis.	SW 1/4 sec.2, T.19 N., R.21 E., at bridge on country road, 1.0 mile south of Reedsville.	38.7	1969-70 1972	7-18-72	2.40
04085420	Branch River near Cato, Wis.	SE 1/4 sec.22, T.20 N., R.22 E., at bridge on country road, 3.3 miles north of Cato.	80.7	1969-70 1972	7-18-72	10.1
04085460	Pigeon River near Millersville, Wis.	SW 1/4 sec.6, T.15 N., R.23 E., at bridge on country road, 2.1 miles southeast of Millersville.	66.1	1969-70 1972	7-19-72	4.20
04085800	Onion River near Waldo, Wis.	On common boundary of secs.10 and 11, T.14 N., R.21 E., at bridge on County Trunk AC, 1.4 miles northwest of Waldo.	18.2	1969-70 1972	7-20-72	9.36
St. Croix River Basin						
05331590	Lower Ox Creek near Gordon, Wis.	NE 1/4 SE 1/4 sec.16, T.44 N., R.11 W., at town road, 4.6 miles northeast of Gordon.	99.4	1969-72	10-13-71	18.2
05331700	Moose River near Solon Springs, Wis.	On common boundary of secs.14 and 23, T.44 N., R.13 W., at bridge on County Trunk M, 7.8 miles southwest of Solon Springs.	49.9	1964 1967 1969-72	10-13-71	23.2
05331900	Chippanazie Creek at Stanberry, Wis.	NW 1/4 sec.33, T.41 N., R.10 W., at culvert on U.S. Highway 63, 0.8 mile southwest of Stanberry.	a33.8	1964 1967 1969-72	10-13-71	17.9
05331950	Bean Brook near Spring Brook, Wis.	NE 1/4 sec.1, T.39 N., R.11 W., at culvert on County Trunk M, 3.5 miles southeast of Spring Brook.	a38.1	1964 1967 1969-72	10-13-71	33.7
05332700	Stuntz Brook near Minong, Wis.	SW 1/4 sec.23, T.41 N., R.13 W., at culvert on County Trunk F, 8.8 miles southwest of Minong.	18.2	1964 1967 1969-72	10-13-71	5.27
05333060	Ounce River near Gordon, Wis.	SW 1/2 sec.30, T.43 N., R.10 W., at bridge on country road, 7.8 miles southeast of Gordon.	a41.7	1964 1967 1969-72	10-13-71	18.9
05333080	Frog Creek near Minong, Wis.	NW 1/4 sec.20, T.42 N., R.11 W., at bridge on country road, 2.4 miles northeast of Minong.	a31.7	1964 1967 1969-72	10-13-71 8-16-72	10.5 12.9
*05333100	Little Frog Creek near Minong, Wis.	NW 1/4 sec.29, T.42 N., R.11 W., at culvert on country road, 2.5 miles east of Minong.	13.6	1961 1963-72	10-13-71	6.08

* Also a crest-stage station.
a Approximately.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		St. Croix River Basin--Continued				
05333510	Chases Brook near Danbury, Wis.	NE 1/4 sec.32, T.42 N., R.15 W., at bridge on country road, 7.0 miles northeast of Danbury.	a38.0	1964 1967 1969-72	10-14-71 8-16-72	14.8 16.6
05334500	Yellow River at Webster, Wis.	On common boundary of secs.4 and 5, T.39 N., R.16 W., at bridge on State Highway 35, 1.3 miles north of Webster.	228	1914≠ 1964 1967 1969-72	10-14-71 8-16-72	204 222
05338900	Wood River near Siren, Wis.	On common boundary of secs.27 and 28, T.38 N., R.17 W., at bridge on country road, 4.8 miles southwest of Siren.	26.8	1964 1967 1969-72	10-15-71 8-16-72	.61 2.73
05338950	North Fork Wood River near Grantsburg, Wis.	E 1/2 sec.8, T.38 N., R.18 W., at bridge on country road, 3.5 miles northeast of Grantsburg.	67.3	1964 1967 1969-72	10-15-71 8-15-72	7.70 18.5
05340400	Wolf Creek near St. Croix Falls, Wis.	SE 1/4 sec.33, T.36 N., R.19 W., at bridge on County Trunk G, 11 miles northwest of St. Croix Falls.	29.3	1964 1967 1969-72	10-15-71 8-15-72	5.00 16.3
		Chippewa River Basin				
05355370	Moose River near Clam Lake, Wis.	SW 1/4 SW 1/4 sec.34, T.42 N., R.4 W., County Trunk GG, 6.1 miles southeast of Clam Lake.	23.9	1969-72	10-15-71	18.6
05355420	Hay Creek near Hayward, Wis.	SW 1/4 sec.31, T.41 N., R.6 W., at culvert on country road, 15 miles east of Hayward.	a14.9	1967 1970-72	10-13-71	9.94
05355530	East Fork Chippewa River near Glidden, Wis.	On common boundary of secs.12 and 13, T.42 N., R.2 W., at bridge on State Highway 13, 0.7 mile southeast of Glidden.	a94.6	1967 1970-72	10-14-71	60.6
05357350	Lost Creek near Powell, Wis.	SE 1/4 sec.27, T.42 N., R.4 E., at bridge on State Highway 47, 1.0 mile west of Powell.	14.5	1967 1969 1972	10-13-71	4.60
05359100	Springstead Creek near Park Falls, Wis.	SE 1/4 sec.16, T.40 N., R.3 E., at bridge on Forest Road No. 147, 16 miles east of Park Falls.	a21.4	1967 1970-72	10-14-71	15.2
05359350	Elk River near Phillips, Wis.	On common boundary of secs.33 and 34, T.38 N., R.2 E., at bridge on County Trunk H, 3.9 miles northeast of Phillips.	a42.1	1967 1970-72	10-14-71	31.9
		Copper Creek Basin				
05388380	Copper Creek near Mt. Sterling, Wis.	NW 1/4 sec.29, T.10 N., R.5 W., at bridge on country road, 4.2 miles west of Mt. Sterling.	14.1	1963 1966-70 1972	9- 6-72	7.21
		Wisconsin River Basin				
05390140	Muskrat Creek at Conover, Wis.	SE 1/4 SW 1/4 sec.4, T.41 N., R.8 E., at U.S. Highway 45, at Conover.	9.95	1969-70 1972	7-12-72	4.32

≠ Operated as a continuous-record gaging station.
a Approximately.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Wisconsin River Basin--Continued				
05390450	Deerskin River near Eagle River, Wis.	NW 1/4 SW 1/4 sec.25, T.41 N., R.11 E., at U.S. Forest Service Road 2178, 10.5 miles northeast of Eagle River.	32.5	1969-70 1972	7-12-72	21.6
05391200	Monico Creek near Monico, Wis.	SW 1/4 NW 1/4 sec.29, T.36 N., R.11 E., at U.S. Highway 45, 0.3 mile northeast of Monico.	19.8	1969-70 1972	7-13-72	.64
05391250	Gudegast Creek near Rhinelander, Wis.	NE 1/4 SE 1/4 sec.9, T.37 N., R.10 E., at town road, 9.5 miles northeast of Rhinelander.	11.3	1969-70 1972	7-13-72	3.72
05391900	Noisy Creek near Rhinelander, Wis.	SW 1/4 SW 1/4 sec.36, T.36 N., R.8 E., at State Highway 17, 6.0 miles southwest of Rhinelander.	36.8	1969-70 1972	7-13-72	7.79
05392150	Mishonagon Creek near Woodruff, Wis.	NE 1/4 NE 1/4 sec.32, T.40 N., R.6 E., at State Highway 47, 3.0 miles northwest of Woodruff.	d11.9	1961 1963-67 1969-70 1972	10-13-71	24.4
05392290	Willow River near Hazelhurst, Wis.	SE 1/4 sec.19, T.38 N., R.4 E., at culvert on country road, 14.9 miles west of Hazelhurst.	7.97	1969-72	10-14-71	10.6
05392320	Rocky Run Creek near Goodnow, Wis.	SE 1/4 sec.17, T.37 N., R.6 E., on country road, 4.3 miles west of Goodnow.	20.3	1969-72	7-11-72	20.9
*05392350	Bearskin Creek near Harshaw, Wis.	SW 1/4 sec.36, T.37 N., R.6 E., at culvert on County Trunk K, 2 1/8 miles southwest of Harshaw.	d27.8	1963-64 b1964-66 c1967-72	10-12-71	49.5
05392450	Little Rice River near Bradley, Wis.	NE 1/4 sec.23, T.36 N., R.5 E., at culvert on Kelly Fire Lane, 5.4 miles northwest of Bradley.	25.9	1969-72	10-12-71 7-11-72	28.4 5.71
05393200	Somo River (e) near Tripoli, Wis.	NW 1/4 sec.10, T.35 N., R.4 E., at bridge on County Trunk T, 1.8 miles southeast of Tripoli.	a44.1	1967 1969-71	10-14-71 7-11-72	28.4 3.85
05393630	Little Pine Creek near Tomahawk, Wis.	On common boundary of secs.31 and 32, T.34 N., R.7 E., at culverts on County Trunk V, 6.5 miles southeast of Tomahawk.	21.1	1967 1969-72	10-12-71 7-11-72	9.43 5.50
		Rock River Basin				
*05431400	Little Turtle Creek at Allens Grove, Wis.	NE 1/4 sec.6, T.1 N., R.15 E., at bridge on country road, 0.2 mile south of Allens Grove.	41.8	1961-69 1972	6-26-72	11.0

* Also a crest-stage station.
a Approximately.
b Operated as a seasonal continuous-record gaging station.
c Operated as a seasonal continuous-record gaging station without records being published.
d Revised.
e Formerly published as Big Somo River.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Streams tributary to Lake Superior					
04024400	Stony Brook near Superior, Wis.	SE 1/4 sec.4, T.47 N., R.14 W., at box culvert on State Highway 35, 12 1/2 miles south of toll bridge on U.S. Highways 2 and 35 at St. Louis River in Superior.	2.20	1959-72	9-20-72	26.63	460
04025200	Pearson Creek near Maple, Wis.	Common boundary of secs.11 and 14, T.48 N., R.11 W., at box culvert on State Highway 13, 4 miles north of Maple.	4.01	1957-72	9-20-72	19.45	850
04026200	Sand River tributary near Red Cliff, Wis.	NE 1/4 sec.14, T.51 N., R.5 W., at box culvert on State Highway 13, 8 miles northwest of Red Cliff.	1.14	1959-72	8-16-72	14.27	360
*04026300	Sioux River near Washburn, Wis.	NE 1/4 sec.35, T.49 N., R.5 W., on County Trunk C, 2 1/2 miles west of Washburn.	d35.2	1959-65 1966≠ 1967-72	8-22-72	16.67	1,420
*04026400	Spillerberg Creek near Cayuga, Wis.	NW 1/4 sec.21, T.43 N., R.2 W., at concrete culvert pipe on State Highway 13, 4 1/4 miles southeast of Cayuga.	6.18	1958-72	8-16-72	12.68	105
04026700	Trout Brook tributary near Marengo, Wis.	NE 1/4 sec.7, T.45 N., R.3 W., at box culvert on State Highway 13, 2.6 miles southeast of Marengo.	.77	1960-72	8-16-72	11.6	160
04026850	Apple Creek near Upson, Wis.	SE 1/4 sec.30, T.45 N., R.1 E., at 2-barrel corrugated culvert on graveled O'Brien Lake Road, 1.5 miles south of Upson.	5.39	1970-72	8-16-72	12.52	⌿
*04027200	Pearl Creek at Grandview, Wis.	NE 1/4 sec.22, T.45 N., R.6 W., at box culvert on U.S. Highway 63, 0.8 mile east of Grandview.	e16.9	1960-72	8-16-72	i15.99	540
*04029700	Boomer Creek near Saxon, Wis.	N 1/2 sec.3, T.46 N., R.1 E., at concrete culvert pipe on U.S. Highway 2, 3 miles east of Saxon.	5.94	1958-72	8-16-72	14.6	205
		Streams tributary to Lake Michigan					
*04059900	Allen Creek tributary near Alvin, Wis.	North boundary sec.7, T.40 N., R.14 E., at culvert on State Highway 70, 2.2 miles southeast of Alvin.	a1.9	1960-72	8-16-72	10.46	8
04063640	North Branch Pine River at Windsor Dam near Alvin, Wis.	SE 1/4 sec.21, T.40 N., R.13 E., at bridge on country road at Windsor Dam 3.8 miles upstream from confluence of North and South Forks, 4 miles southwest of Alvin.	29.4	1967-68≠ 1970-72	4-28-72	2.80	85
04063688	South Branch Popple River near Newald, Wis.	NW 1/4 sec.26, T.38 N., R.15 E., at corrugated twin barrel culvert on unmarked gravel Forest Road 2159, 5.4 miles east of Newald.	8.44	1970-72	8-16-72	11.92	48

* Also a low-flow partial-record station.
≠ Operated as a continuous-record gaging station.
⌿ Discharge not determined.
a Approximately.
d Includes 20.3 sq mi without surface drainage.
e Includes 6.4 sq mi without surface drainage.
i Backwater from logs.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Streams tributary to Lake Michigan--Continued							
*04063800	Woods Creek near Fence, Wis.	SE 1/4 sec.29, T.39 N., R.17 E., at box culvert on State Highway 101, 6 miles north of Fence.	41.4	1958-72	5- 1-72	11.90	305
04064800	Little Popple River near Aurora, Wis.	SW 1/4 sec.1, T.38 N., R.18 E., at 3-barrel corrugated culvert on County Trunk Highway N, 5.5 miles west of Aurora.	35.0	1970-72	4-25-72	13.15	395
*04066300	Cole Creek near Dunbar, Wis.	South boundary sec.34, T.37 N., R.19 E., at culvert on U.S. Highway 8, 3.6 miles southeast of Dunbar.	a3.2	1960-72	4-25-72	10.45	18
04066700	McCall Creek at Wausaukee, Wis.	NW 1/4 sec.1, T.33 N., R.20 E., at culvert on U.S. Highway 141, 1 mile south of Wausaukee.	1.48	1959-72	8- 8-72	11.10	16
04067500	Menominee River near McAllister, Wis.	Sec.17, T.33 N., R.23 E., 300 ft above highway bridge on County Trunk JJ, 2.9 miles east of McAllister.	a4,020	1945-61≠ 1962-72	5- 3-72	17.27	23,600
04067760	Peshtigo River near Cavour, Wis.	SW 1/4 sec.29, T.37 N., R.15 E., at bridge on U.S. Highway 8, 0.7 mile northwest of Cavour.	153	1970-72	4-28-72	14.28	1,140
*04067800	Armstrong Creek near Armstrong Creek, Wis.	W 1/2 sec.27, T.37 N., R.16 E., at bridge on U.S. Highway 8, 1 3/4 miles northwest of Armstrong Creek.	23.1	1958-72	4-29-72	10.56	145
04069700	North Branch Oconto River near Wabeno, Wis.	SW 1/4 sec.9, T.34 N., R.15 E., at pipe arch culvert on County Trunk Highway C, 0.6 mile east of intersection with State Highway 32 in Wabeno.	32.2	1970-72	4-29-72	12.02	150
04071700	North Branch Little River near Coleman, Wis.	On common boundary of secs.2 and 3, T.29 N., R.20 E., at bridge on U.S. Highway 141, 3 3/4 miles south of Coleman.	23.3	1958-72	4-16-72	13.56	390
*04071800	Pensaukee River near Pulaski, Wis.	NE 1/4 sec.1, T.26 N., R.18 E., at bridge on State Highway 32 and 6.1 miles north of Pulaski.	41.8	1961-72	4-22-72	13.59	620
*04073400	Bird Creek at Wautoma, Wis.	S 1/2 sec.34, T.19 N., R.10 E., at concrete culvert on State Highway 21, 1/4 mile west of Wautoma.	3.59	1959-72	9-28-72	11.32	57
04074300	Mud Creek near Nashville, Wis.	SW 1/4 sec.30, T.36 N., R.12 E., at concrete circular culvert on U.S. Highway 8, 3 1/2 miles north of Nashville.	10.0	1970-72	4-26-72	12.57	65
*04074700	Hunting River near Elcho, Wis.	N 1/2 sec.24, T.34 N., R.10 E., at twin culverts on U.S. Highway 45 and State Highway 47, 1 1/2 miles south of Elcho.	a9.0	1958-72	9-26-72	11.80	72
*04074850	Lily River near Lily, Wis.	SE 1/4 sec.11, T.33 N., R.13 E., at culvert on County Trunk Highway A, 3.2 miles north from junction of State Highways 55 and 52 in Lily.	52.4	1970-72	9-26-72	10.76	121
*04079700	Spaulding Creek near Big Falls, Wis.	On common boundary of secs.14 and 15, T.25 N., R.12 E., at culvert on County Trunk E, 1.5 miles north of Big Falls.	a4.9	1959-65 1966≠ 1967-72	4-22-72	10.80	52
04081010	Waupaca River tributary near Waupaca, Wis.	NW 1/4 sec.1, T.21 N., R.12 E., at culvert on U.S. Highway 10, 5 miles southeast of Waupaca.	a1.0	1960-72	4-22-72	11.25	20

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* Also a low-flow partial-record station.
≠ Operated as a continuous-record gaging station.
a Approximately.

Annual Maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Streams tributary to Lake Michigan--Continued							
04081900	Sawyer Creek at Oshkosh, Wis.	SW 1/4 sec.15, T.18 N., R.16 E., at bridge on U.S. Highway 41, 1 mile southwest of Algoma Street Fox River bridge in Oshkosh.	15.3	1961-72	1972	b	300
04083400	East Branch Fond du Lac River tributary near Eden, Wis.	NE 1/4 sec.14, T.14 N., R.17 E., at culvert on U.S. Highway 41, 3 miles west of Eden.	1.19	1961-72	8-18-72	12.00	85
*04085030	Apple Creek near Kaukauna, Wis.	On west boundary sec.2, T.21 N., R.18 E., at bridge on State Highway 55, 3 miles north of Kaukauna.	14.6	1960-72	4-21-72	13.18	320
04085100	East River tributary at Greenleaf, Wis.	NE 1/4 sec.8, T.21 N., R.20 E., at railroad box culvert, 1/2 mile south of Greenleaf.	8.0	1958-72	4-13-72	f12.26	200
04085300	Neshota River tributary near Denmark, Wis.	NE 1/4 sec.7, T.22 N., R.22 E., at box culvert on U.S. Highway 141, 3 3/4 miles northwest of Denmark.	3.08	1959-72	4-13-72	12.5	75
*04085400	Killsnake River near Chilton, Wis.	E 1/2 sec.6, T.18 N., R.20 E., at bridge on country road, 2.4 miles northeast of Chilton.	29.5	1961-72	3-21-72	11.9	660
*04085700	Sheboygan River tributary near Plymouth, Wis.	On common boundary of secs.2 and 11, T.15 N., R.21 E., at concrete culvert on County Trunk J, 3 1/2 miles northeast of Plymouth.	5.51	1959-72	9-21-72	10.9	150
04086400	Milwaukee River tributary near Fredonia, Wis.	SE 1/4 sec.1, T.11 N., R.21 E., at culvert on country road, 2.3 miles southeast of Fredonia.	.84	1962-72	9-21-22	12.5	70
*04087050	Little Menomonee River near Freistadt, Wis.	On common boundary of secs.29 and 32, T.9 N., R.21 E., at bridge on Donges Bay Road, 2 miles south of Freistadt.	7.96	1958-72	12-15-71	11.45	165
04087100	Honey Creek at Milwaukee, Wis.	SE 1/4 sec.15, T.6 N., R.21 E., 400 ft upstream from bridge on S. 68th Street, and 6 miles southwest from mouth of Milwaukee River in Milwaukee.	3.34	1959-72	9-18-72	21.54	680
*04087200	Oak Creek near South Milwaukee, Wis.	On common boundary of secs.21 and 22, T.5 N., R.22 E., at bridge on west Nicholson Road, 3 miles southwest of South Milwaukee.	13.9	1958-72	9-18-72	17.08	740
04087230	West Branch Root River Canal tributary near North Cape, Wis.	SE 1/4 sec.33, T.4 N., R.21 E., at culvert on County Trunk U, 3 miles southeast of North Cape.	3.92	1962-72	4-16-72	11.61	85
*04087250	Pike Creek near Kenosha, Wis.	W 1/2 sec.27, T.2 N., R.22 E., at box culvert on State Highway 43, 3 miles northwest of Kenosha.	7.25	1960-72	9-13-72	15.92	110
St. Croix River Basin							
*05333100	Little Frog Creek near Minong, Wis.	NW 1/4 sec.29, T.42 N., R.11 W., at culvert on country road, 2 1/2 miles east of Minong.	13.0	1961-72	7-22-72	15.93	480
05334100	Sawyer Creek near Shell Lake, Wis.	SE 1/4 sec.13, T.38 N., R.13 W., at box culvert on U.S. Highway 63, 2 miles north of Shell Lake.	1.04	1960-72	4-17-72	12.48	75

* Also a low-flow partial-record station.
b Peak did not reach bottom of the gage.
f Backwater from ice.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		St. Croix River Basin--Continued					
*05335380	Bashaw Brook near Shell Lake, Wis.	SW 1/4 sec.8, T.38 N., R.14 W., at twin box culvert on country road 10.5 miles northwest of Shell Lake.	24.9	1959-65 1966≠ 1967-72	7-23-72	11.14	44
*05340300	Trade River near Frederic, Wis.	SW 1/4 sec.4, T.36 N., R.17 W., at box culvert on State Highways 35 and 48, 2.5 miles southwest of Frederic.	6.34	1958-72	7-22-72	13.02	210
05341700	Willow River tributary near New Richmond, Wis.	NW 1/4 sec.17, T.30 N., R.17 W., at Twin box culvert on County Trunk GG, 3.6 miles southeast of New Richmond.	1.40	1959-72	7-22-72	11.40	32
05341900	Kinnickinnic River tributary at River Falls, Wis.	NE 1/4 sec.14, T.27 N., R.19 W., at bridge on County Trunk FF, 1.6 miles southwest of River Falls.	7.26	1959-72	7-22-72	11.56	380
		Trimbelle Creek Basin					
*05346600	Little Trimbelle Creek near Bay City, Wis.	S 1/2 sec.21, T.25 N., R.18 W., at bridge on County Trunk K, 7 miles northwest of Bay City.	19.9	1961-72	1972	b	220
		Chippewa River Basin					
05356200	Kenyon Creek near Radisson, Wis.	NW 1/4 sec.22, T.38 N., R.6 W., at bridge on State Highway 27, 5 miles east of Radisson.	a7.5	1960-72	4-18-72	11.81	192
05357360	Bear River near Powell, Wis.	NE 1/4 sec.32, T.42 N., R.4 E., at bridge on State Highway 182, 3 miles west of Powell.	118	1972	8-18-72	12.65	560
05357390	Weber Creek near Mercer, Wis.	SE 1/4 sec.21, T.43 N., R.3 E., at culvert on U.S. Highway 51, 3.7 miles northeast of Mercer.	5.86	1970-72	8-17-72	12.65	270
05358100	Smith Creek near Park Falls, Wis.	NE 1/4 sec.15, T.40 N., R.1 W., at culvert on State Highway 13, 1 1/2 miles northeast of Park Falls.	9.11	1970-72	4-17-72	14.26	320
05359200	South Fork Flambeau River tributary near Park Falls, Wis.	SW 1/4 sec.15, T.40 N., R.1 E., at culvert on State Highway 182, 5.1 miles east of Park Falls.	.86	1960-72	8-17-72	11.16	62
*05359600	Price Creek near Phillips, Wis.	SW 1/4 sec.31, T.38 N., R.2 W., at culvert on County Trunk W, 13 miles west of Phillips.	14.7	1958-65 1966≠ 1967-72	4-18-72	12.79	175
05360200	Flambeau River tributary at Ladysmith, Wis.	SW 1/4 sec.27, T.35 N., R.6 W., at culvert on State Highway 27, 1 mile north of Ladysmith.	a0.8	1960-72	7-23-72	11.62	23
*05361400	Hay Creek near Prentice, Wis.	SE 1/4 sec.4, T.35 N., R.1 E., at culvert on U.S. Highway 8, 3.5 miles west of Prentice.	21.9	1961-72	9-26-72	13.21	720
05361420	Douglas Creek near Prentice, Wis.	NE 1/4 sec.17, T.35 N., R.2 E., at culvert on County Trunk Highway C, 2.3 miles southeast from intersection with State Highway 13 in Prentice.	24.6	1970-72	4-20-72	15.12	960
05361600	North Fork Jump River near Phillips, Wis.	SW 1/4 sec.5, T.36 N., R.1 E., at culvert on State Highway 13, 4 miles south of Phillips.	10.4	1970-72	4-18-72	12.25	175

* Also a low-flow partial-record station.
≠ Operated as a continuous-record gaging station.
a Approximately.
b Peak did not reach bottom of the gage.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Chippewa River Basin--Continued							
*05364000	Yellow River at Cadott, Wis.	NE 1/4 sec.31, T.29 N., R.6 W., at bridge on State Highway 27, in Cadott.	351	1943-61≠ 1962-72	9-25-72	9.88	3,000
05364100	Seth Creek near Cadott, Wis.	SW 1/4 sec.17, T.29 N., R.6 W., at culvert on State Highway 27, 3.1 miles north of Cadott.	3.04	1962-72	4-19-72	11.85	85
05364500	Duncan Creek at Bloomer, Wis.	Sec.8, T.30 N., R.9 W., 1/4 mile below Bloomer Dam at Bloomer.	49.2	1945-51≠ 1958-72	4-18-72	4.16	265
*05365700	Goggle-eye Creek near Thorp, Wis.	West boundary sec.19, T.29 N., R.3 W., at culvert on State Highway 73, 1.3 miles north of Thorp.	6.70	1958-72	4-18-72	12.27	160
*05366500	Eau Claire River near Fall Creek, Wis.	NW 1/4 sec.19, T.27 N., R.7 W., 500 ft east of County Trunk K, 3 1/4 miles north of Fall Creek.	758	1943-55≠ 1958-72	9-25-72	9.67	6,350
05367030	Willow Creek near Eau Claire, Wis.	On common boundary of secs.14 and 15, T.26 N., R.9 W., at box culvert on State Highway 93, 4 miles south of Eau Claire.	4.38	1958-72	3-29-72	11.5	150
*05367480	East Branch Pine Creek tributary near Dallas, Wis.	SW 1/4 sec.1, T.32 N., R.12 W., at culvert on County Trunk O, 1 1/2 miles north of Dallas.	3.85	1960-72	7-22-72	12.17	115
05367500	Red Cedar River near Colfax, Wis.	SW 1/4 sec.22, T.30 N., R.11 W., 3.2 miles below Trout Creek and 4.7 miles north of Colfax.	a1,110	1914-61≠ 1962-72	7-20-72	6.02	7,000
05367700	Lightning Creek at Almena, Wis.	NW 1/4 sec.19, T.34 N., R.13 W., at bridge on County Trunk P, in Almena.	19.8	1958-72	7-23-72	11.43	690
05369800	Eau Galle River tributary near Hersey, Wis.	SW 1/4 sec.5, T.28 N., R.15 W., at box culvert on Interstate Highway 94, 2 miles southwest of Hersey.	.65	1960-72	4-13-72	10.64	60
05370600	Arkansaw Creek tributary near Arkansaw, Wis.	SW 1/4 sec.14, T.25 N., R.14 W., at box culvert on U.S. Highway 10, 1 1/4 miles northwest of Arkansaw.	2.56	1959-72	9-25-72	11.4	105
*05370900	Spring Creek near Durand, Wis.	S 1/2 sec.9, T.24 N., R.13 W., at bridge on country road, 4 miles south of Chippewa River bridge in Durand.	6.49	1962-72	9-25-72	13.80	400
By Golly Creek Basin							
05371300	By Golly Creek near Nelson, Wis.	SW 1/4 sec.28, T.23 N., R.13 W., at culvert on County Trunk D, 3 miles northeast of Nelson.	.28	1962-72	1972	b	<10
Buffalo River Basin							
05371800	Buffalo River tributary near Osseo, Wis.	S 1/2 sec.3, T.24 N., R.6 W., at culvert on U.S. Highway 10, 6 1/2 miles east of Osseo.	1.44	1960-72	9-25-72	11.17	92
Waumandee Creek Basin							
*05378200	Eagle Creek near Fountain City, Wis.	SW 1/4 sec.33, T.20 N., R.11 W., at bridge on County Trunk G, 2 1/2 miles north of Fountain City.	26.8	1961-72	8-19-72	12.60	520

* Also a low-flow partial-record station.
≠ Operated as a continuous-record gaging station.
a Approximately.
b Peak did not reach bottom of the gage.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
		Black River Basin					
05380800	Black River tributary near Whittlesey, Wis.	SW 1/4 sec.35, T.32 N., R.1 E., at bridge on State Highway 13, 1.1 miles south of Whittlesey.	2.12	1960-72	4-16-72	12.09	175
*05380900	Poplar River near Owen, Wis.	NW 1/4 sec.25, T.28 N., R.2 W., at bridge on County Trunk M, 4 1/4 miles south of Owen.	157	1958-65 1966≠ 1967-72	4-16-72	15.47	4,300
*05380970	Cawley Creek near Neillsville, Wis.	SW 1/4 sec.25, T.25 N., R.2 W., at bridge on State Highway 73, 3.7 miles north of Neillsville.	38.6	1961-72	9-26-72	16.66	2,840
*05382200	French Creek near Ettrick, Wis.	NE 1/4 sec 27, T.20 N., R.8 W., at bridge on County Trunk D and T, 2 1/2 miles west of Ettrick.	14.3	1960-72	9-26-72	12.50	980
		La Crosse River Basin					
05382300	Beaver Creek tributary near Sparta, Wis.	NW 1/4 sec.11, T.17 N., R.4 W., at box culvert on State Highways 27 and 71, 1.9 miles north of Sparta.	1.72	1959-72	9-26-72	11.72	105
*05382500	Little La Crosse River near Leon, Wis.	NE 1/4 sec.3, T.16 N., R.4 W., 4 miles upstream from mouth and 1.5 miles northwest of Leon.	77.1	1934-61≠ 1962-72	4-22-72	5.1	760
		Mormon Creek Basin					
*05386300	Mormon Creek near La Crosse, Wis.	NE 1/4 sec.19, T.15 N., R.6 W., at bridge on country road, 6 miles southeast of La Crosse.	25.5	1961-72	1972	b	230
		Bad Axe River Basin					
*05387100	North Fork Bad Axe River near Genoa, Wis.	SW 1/4 sec.36, T.13 N., R.7 W., at bridge on State Highway 56, 4.1 miles southeast of Genoa.	68.8	1959-65 1966≠ 1967-72	4-22-72	12.98	840
		Du Charme Creek Basin					
05388460	Du Charme Creek at Eastman, Wis.	NE 1/4 sec.13, T.8 N., R.6 W., at culvert on County Trunk D in Eastman.	.30	1961-72	8-20-72	11.94	145
		Wisconsin River Basin					
*05390140	Muskrat Creek at Conover, Wis.	SW 1/4 sec.4, T.41 N., R.10 E., at corrugated culvert on U.S. Highway 45, 0.1 mile north of Conover.	9.95	1970-72	9-26-72	11.71	57
05390240	Fourmile Creek near Three Lakes, Wis.	NE 1/4 sec.26, T.39 N., R.11 E., at 2-barrel corrugated culvert on blacktop forest road, 5.5 miles northeast of Three Lakes.	11.6	1970-72	4-28-72	11.47	70
05391260	Gudegast Creek near Starks, Wis.	NW 1/4 sec.16, T.37 N., R.10 E., at corrugated culvert on country road, 3 miles northwest of Starks.	13.0	1970-72	8-18-72	12.61	94
05391950	Squaw Creek near Harrison, Wis.	SW 1/4 sec.3, T.35 N., R.8 E., at culvert on County Trunk Highway A, 5 miles northeast of Harrison.	3.19	1970-72	8-18-72	10.29	12

* Also a low-flow partial-record station.
≠ Operated as a continuous-record gaging station.
b Peak did not reach bottom of the gage.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
		Wisconsin River Basin--Continued					
*05392150	Mishonagon Creek near Woodruff, Wis.	NE 1/4 sec.32, T.40 N., R.6 E., at twin culvert on State Highway 47, 3 miles northwest of Woodruff.	11.9	1958-72	8-17-72	11.33	117
*05392350	Bearskin Creek near Harshaw, Wis.	SW 1/4 sec.36, T.37 N., R.6 E., at culvert on County Trunk K, 2 1/8 miles southwest of Harshaw.	27.8	1958-65 1966≠ 1967-72	9-26-72	9.52	68
05393620	Skanawan Creek near Tomahawk, Wis.	SW 1/4 sec.13, T.34 N., R.6 E., at culvert on State Highway 107, 3 1/2 miles southeast of Tomahawk.	6.59	1970-72	4-17-72	11.13	65
05393640	Little Pine Creek near Irma, Wis.	NW 1/4 sec.31, T.34 N., R.7 E., at box culvert on U.S. Highway 51, 3 miles north of Irma.	22.9	1970-72	4-13-71 4-18-72	13.12 12.79	g160 120
*05394000	New Wood River near Merrill, Wis.	E 1/2 sec.15, T.32 N., R.5 E., at bridge on County Trunk E, 9.5 miles northwest of Merrill.	a83.1	1953-61≠ 1962-72	4-18-72	6.14	2,290
*05394200	Devil Creek near Merrill, Wis.	N 1/2 sec.30, T.31 N., R.6 E., at culvert on County Trunk F, 5.8 miles southwest of Merrill.	10.1	1961-72	9-26-72	13.82	480
05395020	Lloyd Creek near Doering, Wis.	SE 1/4 sec.21, T.32 N., R.9 E., at bridge on County Trunk C, 4.5 miles east of Doering.	8.54	1970-72	8-17-72	13.43	330
05395100	Trappe River tributary near Merrill, Wis.	SW 1/4 sec.28, T.31 N., R.8 E., at culvert on County Trunk P, 9 1/2 miles southeast of Merrill.	a2.2	1959-72	9-26-72	12.53	120
05396100	Pet Brook tributary near Edgar, Wis.	SE 1/4 sec.31, T.29 N., R.5 E., at culvert on State Highway 29, 1.5 miles northeast of Edgar.	6.69	1962-72	4-16-72	14.19	480
05397600	Big Sandy Creek near Wausau, Wis.	SE 1/4 sec.31, T.30 N., R.9 E., at bridge on State Highway 52, 10 miles northeast of Wausau.	a9.9	1959-72	9-26-72	13.09	780
05399200	Randall Creek tributary near Abbotsford, Wis.	South boundary of sec.36, T.29 N., R.2 E., at concrete culvert, on State Highway 29, 5.8 miles east of Abbotsford.	.56	1959-72	9-26-72	12.83	215
05401800	Yellow River tributary near Pittsville, Wis.	On common boundary of secs.11 and 14, T.23 N., R.3 E., at bridge on County Trunk C, 2 miles north of Pittsville.	7.27	1959-72	4-10-72	12.66	470
*05403520	Webster Creek at New Lisbon, Wis.	NE 1/4 sec.19, T.16 N., R.3 E., at bridge on State Highway 80, 1.2 miles south of New Lisbon.	11.5	1961-72	9-26-72	13.68	260
*05403550	One Mile Creek near Mauston, Wis.	SE 1/4 sec.24, T.15 N., R.3 E., at bridge on State Highway 58, 2.4 miles south of Mauston.	30.4	1958-72	9-26-72	14.92	650
05403610	Wisconsin River tributary at Wisconsin Dells, Wis.	NE 1/4 sec.3, T.13 N., R.6 E., at culvert on State Highway 13, 0.8 mile north of Wisconsin Dells.	1.16	1962-72	1972	b	<10
*05403700	Dell Creek near Lake Delton, Wis.	NW 1/4 sec.2, T.12 N., R.5 E., at bridge on town road, 1/4 mile north of State Highway 23, and 5 miles southwest of Lake Delton.	44.9	1957-65≠ 1966-72	3-17-72	6.30	276
*05404200	Narrows Creek at Loganville, Wis.	SE 1/4 sec.8, T.11 N., R.4 E., at bridge on State Highways 23 and 154, and 1/4 mile north of Loganville.	40.0	1958-65 1966≠ 1967-72	8-20-72	14.93	2,500

* Also a low-flow partial-record station.
≠ Operated as a continuous-record gaging station.
a Approximately.
b Peak did not reach bottom of the gage.
g Not previously published.

Annual Maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
		Wisconsin River Basin--Continued					
*05405600	Rowan Creek at Poynette, Wis.	S 1/2 sec.35, T.11 N., R.9 E., at bridge on U.S. Highway 51, in Poynette.	10.1	1961-72	3-17-72	11.7	160
05406800	Rocky Branch near Richland Center, Wis.	E 1/2 sec.29, T.10 N., R.1 E., at culvert on State Highway 80, 1 1/2 miles south of Richland Center.	1.71	1960-72	8-26-72	17.4	1,100
*05407100	Richland Creek near Plugtown, Wis.	NW 1/4 sec.9, T.8 N., R.3 W., at bridge on U.S. Highway 61, 2 miles south of Plugtown.	19.2	1958-72	4-21-72	14.29	450
*05407200	Crooked Creek near Boscobel, Wis.	SE 1/4 sec.2, T.7 N., R.3 W., at bridge on U.S. Highway 61, 1.6 miles south of Boscobel.	13.1	1959-72	8-25-72	12.6	470
*05407400	Morris Creek tributary near Norwalk, Wis.	NW 1/4 sec.21, T.16 N., R.2 W., at bridge on County Trunk T, 2 miles north of Norwalk.	4.67	1960-72	9-26-72	12.49	710
		Grant River Basin					
*05413400	Pigeon Creek near Lancaster, Wis.	SW 1/4 sec.15, T.4 N., R.3 W., at culvert on country road, 2 miles south of Lancaster.	6.81	1960-65 1966≠ 1967-72	7-16-72	18.95	1,860
		Platte River Basin					
*05414200	Bear Branch near Platteville, Wis.	NE 1/4 sec.4, T.3 N., R.1 W., at box culvert on State Highway 81, 2.3 miles northwest of Platteville.	2.80	1958-72	4-16-72	15.2	560
		Galena River Basin					
*05414900	Pats Creek near Elk Grove, Wis.	SW 1/4 sec.4, T.2 N., R.1 E., at bridge on State Highway 81, 7 miles southeast of Platteville.	8.49	1960-72	4-16-72	13.01	260
		Rock River Basin					
05423000	West Branch Rock River near Waupun, Wis.	SW 1/4 sec.24, T.14 N., R.15 E., on right bank 700 feet downstream from bridge on U.S. Highway 151, 4.5 miles northeast of Waupun.	41.4	1949-70≠ 1972	9-17-72	3.89	165
*05423300	South Branch Rock River tributary near Waupun, Wis.	S 1/2 sec.22, T.14 N., R.14 E., at concrete culvert on country road 4 1/2 miles northwest of Waupun.	11.9	1959-72	3-16-72	11.36	200
*05423800	East Branch Rock River tributary near Slinger, Wis.	S 1/2 sec.26, T.11 N., R.18 E., at culvert on U.S. Highway 41, 4 miles northwest of Slinger.	3.04	1960-72	8-14-72	13.12	340
05424300	Rock River tributary near Watertown, Wis.	NE 1/4 sec.18, T.8 N., R.16 E., at concrete culvert on old U.S. Highway 16, 5 miles east of Watertown.	4.58	1959-72	9-18-72	12.87	120
*05425700	Robbins Creek near Columbus, Wis.	SE 1/4 sec.11, T.10 N., R.12 E., at culvert on U.S. Highway 16, in Columbus.	8.54	1960-72	3-17-72	12.91	120

* Also a low-flow partial-record station.
≠ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Rock River Basin--Continued					
05426100	Scuppernong Creek near Wales, Wis.	NE 1/4 sec.6, T.6 N., R.18 E., at culvert on U.S. Highway 18, 1.8 miles northwest of Wales.	8.28	1962-72	9-19-72	11.3	120
*05427200	Allen Creek near Fort Atkinson, Wis.	NE 1/4 sec.17, T.5 N., R.14 E., at box culvert on State Highway 26, 2.5 miles southwest of Fort Atkinson.	10.2	1958-72	3-16-72	10.17	80
*05427800	Token Creek near Madison, Wis.	SW 1/4 sec.4, T.8 N., R.10 E., at culvert on U.S. Highway 51, 8 miles northeast of State Capitol in Madison.	24.2	1961-65 1966≠ 1967-72	3-15-72	12.53	325
*05431400	Little Turtle Creek at Allens Grove, Wis.	NE 1/4 sec.6, T.1 N., R.15 E., at bridge on country road, 0.2 mile south of Allens Grove.	41.8	1962-72	8-25-72	14.60	1,490
*05432300	Rock Branch near Mineral Point, Wis.	SE 1/4 sec.8, T.4 N., R.3 E., at box culvert on State Highway 23, 2 1/2 miles south of Mineral Point.	4.83	1959-72	8-11-72	13.75	570
*05433500	Yellowstone River near Blanchardville, Wis.	NE 1/4 sec.34, T.4 N., R.4 E., 0.6 mile upstream from bridge on County Trunk F, and 7 miles west-southwest of Blanchardville.	28.5	1954-65≠ 1966-72	4-21-72	7.96	⌿
05434200	Skinner Creek tributary near Monroe, Wis.	S 1/2 sec.14, T.2 N., R.7 E., at culvert on State Highway 69, 2.4 miles north of Monroe.	.48	1959-72	3-11-72	10.95	24
05435900	Sugar River tributary near Pine Bluff, Wis.	SE 1/4 sec.27, T.7 N., R.7 E., at culvert on County Trunk J, 1.1 miles southeast of Pine Bluff.	7.46	1961-72	3-12-72	f13.44	165
*05436200	Gill Creek near Brooklyn, Wis.	NW 1/4 sec.16, T.4 N., R.9 E., at culvert on State Highway 92, 4.3 miles west of Brooklyn.	3.34	1961-72	4-22-72	12.92	90
*05437200	East Fork Raccoon Creek tributary near Beloit, Wis.	On common boundary of secs.30 and 31, T.1 N., R.12 E., at culvert on State Highway 81, 2.9 miles west of Beloit.	4.67	1958-72	8- 2-72	12.32	160
		Illinois River Basin					
05544300	Mukwonago River tributary near Mukwonago, Wis.	S 1/2 sec.36, T.5 N., R.18 E., at culvert on State Highway 83, 1 1/2 miles southeast of Mukwonago.	1.32	1960-72	1972	j	⌿
05545100	Sugar Creek at Elkhorn, Wis.	SW 1/4 sec.29, T.3 N., R.17 E., at culvert on State Highway 11, 2 miles northeast of Elkhorn.	6.68	1962-72	4-16-72	12.57	225
05545200	White River tributary near Burlington, Wis.	On common boundary of secs.27 and 34, T.3 N., R.18 E., at box culvert on State Highway 11, 4.5 miles west of Burlington.	2.42	1958-72	3-17-72	12.48	155
*05545300	White River near Burlington, Wis.	NW 1/4 sec.1, T.2 N., R.18 E., at bridge on State Highway 36, 2 1/4 miles southwest of Burlington.	97.5	1958-65 1966≠ 1967-72	4-21-72	12.43	1,140
*05548150	North Branch Nippersink Creek tributary near Genoa City, Wis.	E 1/2 sec.32, T.1 N., R.18 E., at bridge on County Trunk B, 3 miles west of Genoa City.	13.8	1962-72	9-19-72	11.62	196

* Also a low-flow partial-record station.
≠ Operated as a continuous-record gaging station.
⌿ Discharge not determined.
f Backwater from ice.
j Gage not operating.

Measurements at Miscellaneous Sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table or in the low-flow investigations section if a series of measurements were made along a reach of a stream. Those that are measurements of base flow are designated by an asterisk (*).

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Streams tributary to Lake Michigan				
Mecan River	Fox River	NW 1/4 NW 1/4 sec.8, T.18 N., R.9 E., Waushara County, at bridge on County Trunk GG, 2.3 miles northwest of Richford.	-	1970-71	12-11-71 3-11-72 4- 4-72 4-18-72 4-28-72 6-24-72 6-29-72 7-11-72 7-28-72 9-20-72	*11.30 *11.30 *12.79 *12.57 *12.33 *11.70 *10.83 *10.99 *10.65 *12.43
Little Wolf River	Wolf River	SE 1/4 NE 1/4 sec.34, T.26 N., R.10 E., Marathon County, at bridge on State Highway 49, and about 1.5 miles south of Galloway.	-	-	7-17-72 7-25-72	*9.05 *6.21
Holt Creek	Little Wolf River	NW 1/4 sec.28, T.26 N., R.10 E., Marathon County, at country road bridge, 1.6 miles west of Galloway.	-	-	5- 4-72 5-15-72 5-23-72 6- 2-72 7-17-72 7-25-72	11.1 6.15 *3.42 *2.70 *2.23 *1.69
Do	Do	SE 1/4 sec.27, T.26 N., R.10 E., Marathon County, at country road bridge, 1.0 mile southeast of Galloway.	-	-	5- 4-72 5-15-72 5-23-72 6- 2-72 7-17-72 7-25-72	16.7 10.6 *5.6 *4.90 *4.01 *2.94
Do	Do	SE 1/4 sec.34, T.26 N., R.10 E., Marathon County, at bridge on State Highway 49, and 2.3 miles south of Galloway.	-	-	5- 4-72 5-15-72 5-23-72 6- 2-72 7-17-72 7-25-72	33.8 18.53 *10.8 *8.53 *7.25 *4.55
		St. Croix River Basin				
Willow River	St. Croix River	NW 1/4 SW 1/4 sec.2, T.29 N., R.19 W., St. Croix County, at bridge on County Trunk I, at Burkhardt.	-	1971	3-20-72	371
		Chippewa River Basin				
Pine Creek	Flambeau River	NW 1/4 NW 1/4 sec.27, T.41 N., R.2 W., Ashland County, at country road, 5.3 miles west of Butternut.	-	-	10-12-71	*a2.9
Do	Do	NW 1/4 NE 1/4 sec.19, T.40 N., R.2 W., Price County, 0.3 mile downstream from Pine Creek Road, and 5.4 miles north of Oxbow.	-	-	10-12-71	*a15.4
Do	Do	SE 1/4 NW 1/4 sec.19, T.40 N., R.2 W., Price County, upstream from Hay Creek, and 5.2 miles north of Oxbow.	-	-	10-12-71	*a13.7
Hay Creek	Pine Creek	NE 1/4 SW 1/4 sec.19, T.40 N., R.2 W., Price County, 200 ft upstream from mouth, and 5.1 miles north of Oxbow.	-	-	10-12-71	*a1.91

a Published in Hydrology of Pine Creek, Wisconsin, U.S. Geological Survey, Open-file Report, December 1971.

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Chippewa River Basin--Continued				
Pine Creek	Flambeau River	NW 1/4 SW 1/4 sec.19, T.40 N., R.2 W., Price County, 0.4 mile downstream from Hay Creek, and 4.8 miles north of Oxbow.	-	-	10-12-71	*a18.4
Do	Do	NW 1/4 NW 1/4 sec.30, T.40 N., R.2 W., Price County, 1.1 miles downstream from Hay Creek, and 4.4 miles north of Oxbow.	-	-	10-12-71	*a18.9
Chippewa River	Mississippi River	NE 1/4 sec.25, T.27 N., R.10 W., Eau Claire County, at bridge on State Highways 37 and 85 at Eau Claire, 1.2 miles upstream from Lowes Creek and 2.8 miles downstream from Eau Claire River.	6,630	1902-09≠ 1944-54≠ 1966-69 1971	3-13-72	58,000
Red Cedar River	Chippewa River	SE 1/4 NE 1/4 sec.21, T.36 N., R.11 W., Barron County, outlet Red Cedar Lake at south edge of Mikana.	148	-	5-29-72 7-18-72 8- 9-72	*68.5 91.5 132
Brill River	Red Cedar River	SW 1/4 SW 1/4 sec.24, T.37 N., R.11 W., Washburn County, outlet Long Lake, 1.2 miles east of Nobleton.	83.6	-	5-29-72 7-14-72 8- 9-72	*18.1 41.8 59.5
Bear Creek	Do	NW 1/4 NE 1/4 sec.18, T.36 N., R.11 W., Barron County, at outlet of Bear Lake, at Haugen.	36.8	-	7-14-72 8- 9-72	14.4 20.5
Red Cedar River	Chippewa River	SE 1/4 SW 1/4 sec.21, T.35 N., R.11 W., Barron County, at Illinois Northern Railroad bridge in Rice Lake.	378	-	5-29-72 6-13-72 7-18-72 8- 8-72	*178 *140 267 292
Chetek River	Red Cedar River	NW 1/4 SW 1/4 sec.31, T.33 N., R.10 W., Barron County, at County Trunk I, downstream from Tenmile Creek, 1.8 miles south of Chetek.	194	-	7-18-72 8- 8-72	169 178
		Black River Basin				
Levis Creek	Black River	NE 1/4 SE 1/4 sec.12, T.21 N., R.4 W., Jackson County, at bridge on State Highway 54, 2.2 miles northeast of Black River Falls.	39.7	1964 1966-70	7- 7-72	b10.7
		Sugar Creek Basin				
Sugar Creek	Mississippi River	SW 1/4 SE 1/4 sec.32, T.11 N., R. 5 W., Crawford County, 0.3 miles downstream from bridge on County Trunk C, 3.1 miles southwest of Rising Sun.	7.81	1969	9- 6-72	*3.30
Sugar Creek tributary	Sugar Creek	NW 1/4 NW 1/4 sec.7, T.10 N., R.5 W., Crawford County, at mouth, 3.5 miles southwest of Rising Sun.	2.40	1969	9- 6-72	*0.17
		Copper Creek Basin				
North Branch Copper Creek tributary	North Branch Copper Creek (head of Copper Creek)	NW 1/4 SW 1/4 sec.22, T.10 N., R.5 W., Crawford County, 300 ft upstream from State Highway 171, 0.1 mile upstream from mouth, 1.6 miles west of Mt. Sterling.	1.24	1969	9- 6-72	*0.50
Upper Copper Creek	Do	SE 1/4 NE 1/4 sec.16, T.10 N., R.5 W., Crawford County, 1.5 miles upstream from bridge on State Highway 171, 2.5 miles northeast of Mt. Sterling.	2.33	1969	9- 6-72	*0.52

≠ Regular gaging station during this period.

a Published in Hydrology of Pine Creek, Wisconsin, U.S. Geological Survey, Open-file Report, December 1971.

b Also operated as low-flow partial-record station (05381350).

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Wisconsin River Basin						
Witches Gulch	Wisconsin River	SW 1/4 NW 1/4 sec.21, T.14 N., R.6 E., Adams County, on State Highway 13, 3.4 miles northwest of Wisconsin Dells.	6.16	-	4-21-72 7-12-72 8-28-72	1.13 1.01 1.48
Baraboo River	Do	SE 1/4 SE 1/4 sec.15, T.12 N., R.4 E., Sauk County, at bridge on town road, 1.0 mile south of Reedsburg.	-	1967 1971	3-17-72	805
Black Earth Creek	Blue Mounds Creek	SW 1/4 NW 1/4 sec.3, T.7 N., R.7 E., Dane County, at bridge on County Trunk KP, at Cross Plains.	26.1	-	3-17-72	197
Do	Do	SE 1/4 SW 1/4 sec.9, T.8 N., R.6 E., Dane County, at bridge on County Trunk Y, at Mazomanie.	98.6	-	3-17-72	257
Kickapoo River	Wisconsin River	NE 1/4 NE 1/4 sec.20, T.13 N., R.2 W., Vernon County, at bridge on State Highway 131, 1.4 miles north of La Farge.	262	-	10- 6-71	129
Do	Do	NE 1/4 NE 1/4 sec.24, T.12 N., R.3 W., Vernon County, at bridge on State Highway 56 at Viola.	340	1960-62 1964-65 1968 1971	3-20-72	1,340
Do	Do	NW 1/4 SW 1/4 sec.8, T.11 N., R.3 W., Vernon County, at bridge on U.S. Highway 14, 5 miles upstream from mouth of Reads Creek, at Readstown.	485	1952 1960-62 1965 1968 1971	3-17-72	1,470
Do	Do	SE 1/4 sec.30, T.11 N., R.3 W., Crawford County, at bridge on State Highway 131, 450 ft downstream from Baker Creek, at Soldiers Grove.	530	1939≠ 1960 1962 1965 1967 1971	3-17-72	1,190
Conway Valley tributary	Conway Valley	SW 1/4 NW 1/4 sec.32, T.11 N., R.4 W., Crawford County, at bridge on County Trunk C, 5.7 miles west of Soldiers Grove.	1.67	1964 1969	9- 6-72	*0.62
Kickapoo River tributary	Kickapoo River	SW 1/4 SE 1/4 sec.21, T.10 N., R.4 W., Crawford County, at bridge on country road, 0.2 miles upstream from mouth, 0.5 miles northwest of Gays Mills.	4.67	1969	9- 7-72	*2.68
Wisconsin River	Mississippi River	NW 1/4 NE 1/4 sec.14, T.6 N., R.6 W., Crawford County, at bridge on U.S. Highway 18, at Bridgeport.	11,700	1935-36 1938 1944-46 1950 1951 1952 1955 1960 1965-67 1970-71	4-26-72	46,300
Rock River Basin						
Rock River tributary	Rock River	SW 1/4 NW 1/4 sec.14, T.8 N., R.16 E., Jefferson County, at mouth, 1.7 miles northeast of Ixonia.	-	-	6- 2-72	*0.44
Steel Brook tributary	Steel Brook	SE 1/4 SW 1/4 sec.1, T.4 N., R.15 E., Walworth County, at bridge on town road, 3.3 miles east of Whitewater.	3.26	-	6-26-72	*1.45

≠ Regular gaging station during this period.

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Rock River Basin--Continued				
Whitewater Creek	Bark River	NE 1/4 SE 1/4 sec.15, T.4 N., R.15 E., Walworth County, at town road, 2.5 miles southeast of Whitewater.	20.61	1971	6-27-72	*11.7
Do	Do	NE 1/4 SW 1/4 sec.10, T.4 N., R.15 E., Walworth County, at town road, 1.5 miles southeast of Whitewater.	c22.7	1926-28≠ 1946-54≠ 1966 1971	6-27-72	*13.8
Spring Brook tributary	Spring Creek	NE 1/4 SE 1/4 sec.18, T.4 N., R.15 E., Walworth County, at culvert on town road, 2.5 miles southwest of Whitewater.	-	1971	6-26-72	*2.51
Spring Brook	Whitewater Creek	NW 1/4 SE 1/4 sec.8, T.4 N., R.15 E., Walworth County, at State Highway 89, 1.2 miles southwest of Post Office in Whitewater.	16.15	1971	6-26-72	*4.95
Turtle Creek tributary	Turtle Creek	NE 1/4 NE 1/4 sec.24, T.3 N., R.15 E., Walworth County, at bridge on County Trunk P, 5.2 miles north of Horton Park in Delavan.	3.03	-	6-27-72	*1.08
Do	Do	NW 1/4 SW 1/4 sec.31, T.3 N., R.16 E., Walworth County, at bridge on County Trunk P, 0.45 mile upstream from mouth and 3.0 miles north of Delavan.	2.58	1968-69	6-28-72	*1.53
Do	Do	SW 1/4 SE 1/4 sec.5, T.2 N., R.16 E., Walworth County, at bridge on County Trunk O, 1.3 miles north of Racine Street intersection in Delavan.	9.0	-	6-28-72	*0.24
Turtle Creek	Rock River	NE 1/4 NW 1/4 sec.18, T.2 N., R.16 E., Walworth County, at bridge on town road, at outlet of Comus Lake at Delavan.	33.1	1967-69	6-26-72	*10.4
Jackson Creek	Turtle Creek	NE 1/4 SE 1/4 sec.12, T.2 N., R.16 E., Walworth County, at bridge on State Highway 67 and 1.9 miles south of Elkhorn.	9.59	1968-69	6- 2-72 6-26-72	0.828 *0.995
Delavan Lake Outlet	Do	SW 1/4 SE 1/4 sec.20, T.2 N., R.16 E., Walworth County, at bridge on town road, and 1.4 miles southeast of Delavan.	40.6	1967-69	6-27-72	*5.48
Do	Do	SW 1/4 NW 1/4 sec.18, T.2 N., R.16 E., Walworth County, at bridge on County Trunk P at Delavan.	47.4	1967 1969	6-26-72	*5.26
Turtle Creek	Rock River	NE 1/4 SW 1/4 sec.10, T.2 N., R.15 E., Walworth County, at bridge on State Highway 11 and 3.5 miles west of Delavan Post Office.	87.78	-	6-26-72	*22.8
Do	Do	NW 1/4 SW 1/4 sec.18, T.2 N., R.15 E., Walworth County, at bridge on County Trunk C, and 3.5 miles north of Allens Grove.	107.3	-	6-26-72	*42.0
Little Turtle Creek	Turtle Creek	NE 1/4 NE 1/4 sec.36, T.1 N., R.14 E., Rock County, at bridge on private road and 2.5 miles west of Sharon.	6.26	-	6-26-72	*1.30
Ladd Creek	Little Turtle Creek	SW 1/4 SE 1/4 sec.17, T.1 N., R.15 E., Walworth County, at bridge on Salt Box Road, and 3.0 miles south of Allens Grove.	6.33	1968-69	6-26-72	*1.26
Do	Do	NE 1/4 SW 1/4 sec.7, T.1 N., R.15 E., Walworth County, at mouth and 1.9 miles south of Allens Grove.	12.1	1968-69	6-26-72	*3.64

≠ Regular gaging station during this period.
c Revised.

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Rock River Basin--Continued				
Little Turtle Creek tributary	Little Turtle Creek	NE 1/4 SE 1/4 sec.32, T.2 N., R.15 E., Walworth County, at culvert on State Highway 15 and 1.2 miles east of Allens Grove.	11.0	1968-69	6-26-72	*2.16
Do	Do	SE 1/4 NE 1/4 sec.31, T.2 N., R.15 E., Walworth County, at bridge on country road, 0.7 mile north of Allens Grove.	22.2	-	6-26-72	*4.14
		Illinois River Basin				
Honey Creek	Fox River	SE 1/4 NW 1/4 sec.36, T.4 N., R.16 E., Walworth County, at State Highway 67, 4.9 miles south of Little Prairie.	16.31	-	6-26-72	2.32

Series of base-flow discharge measurements were made in various areas of the State during the 1972 water year. These measurements were made as part of a comprehensive program now being carried on in cooperation with the University Extension, the University of Wisconsin Geological and Natural History Survey, to investigate the water resources of all major river basins within the State of Wisconsin or as part of a program in cooperation with the Wisconsin Department of Natural Resources, the object of which is to obtain information on the variability of base flow within small basins of about 100 square miles.

The measurements for each study are listed in order proceeding downstream, and each tributary is inserted in the order in which it enters the main stream. The data collected in these series of measurements were used in determining the base-flow yields of various parts of the basins. Drainage areas shown were determined from the most recent U.S. Geological Survey maps of the area. Water temperature and specific conductance measurements were obtained at the time the discharge measurements were made and are available upon request to the district office.

STREAMS TRIBUTARY TO LAKE SUPERIOR

Montreal River basin low-flow investigation

A series of base-flow discharge measurements was made in the Montreal River basin, upstream from Iron Mountain, Michigan, during the period October 12-14. In the week prior to and including the dates the measurements were made, weather records indicate an average of 1.06 inches of precipitation in the area. Based on weather records and recorded streamflow data in the region, the discharge measurements are considered to represent medium to high-range base flow.

Stream	Location	Drainage area (sq mi)	Measured Discharge		
			Date	Cfs	Cfsm
	Discharge measurements of Montreal River and tributaries				
Montreal River tributary	SW 1/4 SW 1/4 sec.20, T.44 N., R.3 E., Iron County, at culvert on U.S. Highway 51, and 12.6 miles south of Hurley.	0.59	10-14-71	0.22	.373
Do	NW 1/4 SW 1/4 sec.8, T.44 N., R.3 E., Iron County, at culvert on U.S. Highway 51, 10.2 miles south of Hurley.	.25	10-14-71	.28	1.12
Laymans Creek	SE 1/4 SW 1/4 sec.1, T.44 N., R.2 E., Iron County, at culvert on town road, 9.3 miles south of Hurley.	.40	10-13-71	2.30	5.75
Do	SW 1/4 NW 1/4 sec.6, T.44 N., R.3 E., Iron County, above confluence with tributary, and 9.0 miles south of Hurley.	5.02	10-13-71	4.65	.926
Laymans Creek tributary	NW 1/4 SW 1/4 sec.6, T.44 N., R.3 E., Iron County, at culverts on town road, 9.1 miles south of Hurley.	9.00	10-13-71	5.52	.613
Do	NE 1/4 NE 1/4 sec.6, T.44 N., R.3 E., Iron County, at Schomberg Park, 8.6 miles south of Hurley.	2.17	10-12-71	1.45	.668
Laymans Creek	NE 1/4 NE 1/4 sec.6, T.44 N., R.3 E., Iron County, at bridge on U.S. Highway 51, 8.8 miles south of Hurley.	r17.5	‡10-12-71	10.9	.623
Do	NW 1/4 NE 1/4 sec.32, T.45 N., R.3 E., Iron County, at bridge on town road, 8.0 miles south of Hurley.	18.4	10-13-71	14.1	.766
Montreal River	SE 1/4 NE 1/4 sec.28, T.45 N., R.3 E., Iron County, at end of town road, 7.5 miles south of Hurley.	39.1	10-12-71	28.0	.716
Montreal River tributary	NW 1/4 NW 1/4 sec.29, T.45 N., R.3 E., Iron County, at culvert on town road, 6.8 miles south of Hurley.	.68	10-13-71	.32	.471
Do	NW 1/4 SW 1/4 sec.20, T.45 N., R.3 E., Iron County, at culverts on town road, 6.2 miles south of Hurley.	1.84	10-12-71	.60	.326
Do	NE 1/4 NE 1/4 sec.20, T.45 N., R.3 E., Iron County, at culvert on town road, 5.8 miles south of Hurley.	3.03	10-12-71	.93	.307
Whitney Creek	SE 1/4 NW 1/4 sec.13, T.46 N., R.46 W., Gogebic County, at bridge on town road, 5.4 miles south of Ironwood, Michigan.	4.18	10-14-71	2.38	.569
Montreal River	SW 1/4 SE 1/4 sec.8, T.45 N., R.3 E., Iron County, at bridge on County Trunk Highway C, 4.7 miles south of Hurley.	r52.1	10-12-71	30.4	.583

STREAMS TRIBUTARY TO LAKE MICHIGAN

West Branch Fond du Lac River basin low-flow investigation

A series of base-flow discharge measurements was made in the West Branch Fond du Lac River basin during the period November 16-18. In the week prior to the measurements, weather records indicate .01 inch precipitation fell in the area. On the first day of the measurements, about .29 inch of precipitation fell, but this amount is presumed not to have affected base-flow conditions. Based on recorded streamflow data in the region, the discharge measurements are considered to represent medium-range base flow.

	Discharge measurements of West Branch Fond du Lac River and tributaries				
West Branch Fond du Lac River	SW 1/4 SW 1/4 sec.4, T.15 N., R.15 E., Fond du Lac County, on County Trunk Highway M, 2.6 miles west of Rosendale.	.75	11-16-71	0	0

r Revised.
‡ Other discharge measurements available.

STREAMS TRIBUTARY TO LAKE MICHIGAN

West Branch Fond du Lac River basin low-flow investigation--Continued

Discharge measurements of West Branch Fond du Lac River and tributaries--Continued

Stream	Location	Drainage area (sq mi)	Measured Discharge		
			Date	Cfs	Cfsm
West Branch Fond du Lac River	NE 1/4 SE 1/4 sec.3, T.15 N., R.15 E., Fond du Lac County, at bridge on country road, 0.9 mile southwest of Rosendale.	3.04	11-16-71	.27	.089
Do	NW 1/4 SW 1/4 sec.36, T.16 N., R.15 E., Fond du Lac County, at culverts on County Trunk Highway 000 at sewage plant, 0.9 mile northeast of Rosendale.	5.32	11-16-71	.97	.182
West Branch Fond du Lac River tributary	NE 1/4 NW 1/4 sec.35, T.16 N., R.15 E., Fond du Lac County, at bridge on State Highway 26, 0.8 mile north of Rosendale.	2.85	11-16-71	.66	.232
Do	SW 1/4 NE 1/4 sec.18, T.16 N., R.15 E., Fond du Lac County, at culvert on country road, 5.1 miles northwest of Rosendale.	3.08	11-18-71	.11	.036
Do	NE 1/4 NW 1/4 sec.28, T.16 N., R.15 E., Fond du Lac County, at bridge on County Trunk Highway M, 2.9 miles northwest of Rosendale.	12.0	11-18-71	.99	.082
Tributary to unnamed tributary	NW 1/4 NW 1/4 sec.10, T.16 N., R.15 E., Fond du Lac County, on country road at Triangle School, 5.2 miles north of Rosendale.	5.38	11-18-71	.09	.017
Do	NW 1/4 NE 1/4 sec.15, T.16 N., R.15 E., Fond du Lac County, at culvert on County Trunk Highway N, 3.9 miles north of Rosendale.	2.76	11-18-71	.08	.029
West Branch Fond du Lac River tributary	NE 1/4 NW 1/4 sec.26, T.16 N., R.15 E., Fond du Lac County, at bridge on State Highway 26, 2.0 miles north of Rosendale.	30.6	11-17-71	3.01	.098
Tributary to unnamed tributary	SE 1/4 NE 1/4 sec.23, T.16 N., R.15 E., Fond du Lac County, at culvert on private road on State Highway 26, 2.8 miles north of Rosendale.	.96	11-18-71	.25	.260
West Branch Fond du Lac River tributary	NE 1/4 SW 1/4 sec.14, T.15 N., R.15 E., Fond du Lac County, at bridge on State Highway 26, 2.6 miles south of Rosendale.	1.84	11-16-71	.26	.141
Do	NW 1/4 NW 1/4 sec.7, T.15 N., R.15 E., Fond du Lac County, at bridge on County Trunk Highway KKK, 2.0 miles southeast of Rosendale.	4.93	11-17-71	1.01	.205
Do	NE 1/4 SE 1/4 sec.36, T.16 N., R.15 E., Fond du Lac County, at bridge on County Trunk Highway OOO, 1.5 miles east of Rosendale.	8.80	11-16-71	1.18	.134
West Branch Fond du Lac River	SE 1/4 SW 1/4 sec.29, T.16 N., R.16 E., Fond du Lac County, near end of private road, 3.3 miles east of Rosendale.	56.6	11-16-71	6.06	.107
West Branch Fond du Lac River tributary	SW 1/4 SW 1/4 sec.16, T.16 N., R.16 E., Fond du Lac County, at culvert on County Trunk Highway N, 4.8 miles northeast of Rosendale.	.10	11-17-71	0	0
Tributary to unnamed tributary	SE 1/4 SW 1/4 sec.20, T.16 N., R.16 E., Fond du Lac County, on country road, 3.8 miles northeast of Rosendale.	.43	11-17-71	0	0
West Branch Fond du Lac River tributary	NE 1/4 NW 1/4 sec.16, T.16 N., R.16 E., Fond du Lac County, on country road, 5.3 miles northeast of Rosendale.	2.90	11-17-71	0	0
Do	SW 1/4 SE 1/4 sec.16, T.16 N., R.16 E., Fond du Lac County, on County Trunk Highway N, 5.0 miles northeast of Rosendale.	1.55	11-17-71	0	0
West Branch Fond du Lac River	SW 1/4 NW 1/4 sec.12, T.15 N., R.16 E., Fond du Lac County, at bridge on State Highway 23, 7.0 miles east of Rosendale.	77.0	11-17-71	6.55	.085
Do	SE 1/4 SE 1/4 sec.13, T.15 N., R.16 E., Fond du Lac County, at bridge on country road, 7.9 miles east of Rosendale.	79.8	11-17-71	6.51	.082
≠Do	NE 1/4 NE 1/4 sec.20, T.15 N., R.17 E., Fond du Lac County, at County Trunk Highway T, 2.0 miles southwest of downtown Fond du Lac.	r84.3	11-17-71	7.28	.086

East Branch Fond du Lac River basin low-flow investigation

A series of base-flow discharge measurements was made in the East Branch Fond du Lac River basin during the period November 16-18. In the week prior to the measurements, weather records indicate .01 inch precipitation fell in the area. On the first day of the measurements, about .29 inch of precipitation fell, but this amount is presumed not to have affected base-flow conditions. Based on recorded streamflow data in the region, the discharge measurements are considered to represent medium-range base flow.

Discharge measurements of East Branch Fond du Lac River and tributaries

Stream	Location	Drainage area (sq mi)	Date	Cfs	Cfsm
East Branch Fond du Lac River	NE 1/4 NW 1/4 sec.9, T.14 N., R.16 E., Fond du Lac County, at site on U.S. Highway 151, 8.9 miles southwest of Fond du Lac Post Office.	4.69	11-17-71	.002	-

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r Revised.
≠ Formerly operated as a continuous-record gaging station.

STREAMS TRIBUTARY TO LAKE MICHIGAN

East Branch Fond du Lac River basin low-flow investigation--Continued

Stream	Location	Drainage area (sq mi)	Measured Discharge		
			Date	Cfs	Cfsm
Discharge measurements of East Branch Fond du Lac River and tributaries--Continued					
East Branch Fond du Lac River	SE 1/4 NE 1/4 sec.9, T.14 N., R.16 E., Fond du Lac County, at site on country road, 8.5 miles southwest of Fond du Lac Post Office.	8.55	11-17-71	0	0
East Branch Fond du Lac River tributary	NE 1/4 SW 1/4 sec.10, T.14 N., R.16 E., Fond du Lac County, at site on country road, 8.3 miles southwest of Fond du Lac Post Office.	5.31	11-17-71	.03	.006
Campground Creek	NW 1/4 NE 1/4 sec.29, T.14 N., R.17 E., Fond du Lac County, on County Trunk Highway F, 8.3 miles south of Fond du Lac Post Office.	.46	11-16-71	0	0
Campground Creek tributary	NW 1/4 SW 1/4 sec.21, T.14 N., R.17 E., Fond du Lac County, on country road, 7.9 miles south of Fond du Lac Post Office.	.25	11-16-71	0	0
Do	SW 1/4 NW 1/4 sec.21, T.14 N., R.17 E., Fond du Lac County, on country road, 7.5 miles south of Fond du Lac Post Office.	.26	11-16-71	0	0
Campground Creek	NW 1/4 NE 1/4 sec.19, T.14 N., R.17 E., Fond du Lac County, at culvert on country road, 7.7 miles south of Fond du Lac Post Office.	4.03	11-16-71	1.71	.424
Do	SW 1/4 SE 1/4 sec.11, T.14 N., R.16 E., Fond du Lac County, at bridge on County Trunk Highway Y, 7.9 miles southwest of Fond du Lac Post Office.	8.64	11-17-71	2.55	.295
Campground Creek tributary	NE 1/4 NE 1/4 sec.14, T.14 N., R.16 E., Fond du Lac County, at culvert on County Trunk Highway Y, 7.9 miles southwest of Fond du Lac Post Office.	.49	11-16-71	.06	.122
Campground Creek	NW 1/4 SE 1/4 sec.10, T.14 N., R.16 E., Fond du Lac County, at site on country road, 8.1 miles southwest of Fond du Lac Post Office.	10.5	11-17-71	2.86	.272
Sevenmile Creek tributary	SE 1/4 NW 1/4 sec.18, T.15 N., R.16 E., Fond du Lac County, on County Trunk Highway C, 9.3 miles west of Fond du Lac Post Office.	.61	11-17-71	0	0
Do	NE 1/4 SW 1/4 sec.19, T.15 N., R.16 E., Fond du Lac County, at bridge on County Trunk Highway C, 9.4 miles west of Fond du Lac Post Office.	1.29	11-17-71	.66	.512
Sevenmile Creek	NE 1/4 NW 1/4 sec.27, T.15 N., R.16 E., Fond du Lac County, at bridge on County Trunk Highway Y, 6.6 miles west of Fond du Lac Post Office.	16.8	11-17-71	1.29	.077
Do	SW 1/4 NE 1/4 sec.3, T.14 N., R.16 E., Fond du Lac County, at site on county road, 7.4 miles southwest of Fond du Lac Post Office.	18.7	11-17-71	1.70	.091
East Branch Fond du Lac River	SW 1/4 SW 1/4 sec.2, T.14 N., R.16 E., Fond du Lac County, at site on County Trunk Highway Y, 7.3 miles southwest of Fond du Lac Post Office.	45.3	11-17-71	4.34	.096
Do	SW 1/4 SE 1/4 sec.30, T.15 N., R.17 E., Fond du Lac County, at bridge on County Trunk Highway D, 4.3 miles southwest of Fond du Lac Post Office.	52.2	11-17-71	5.18	.099
East Branch Fond du Lac River tributary	NW 1/4 NW 1/4 sec.25, T.15 N., R.16 E., Fond du Lac County, at site on country road, 4.9 miles southwest of Fond du Lac Post Office.	2.27	11-17-71	0	0
Do	SW 1/4 SE 1/4 sec.30, T.15 N., R.17 E., Fond du Lac County, at site on U.S. Highway 151, 4.1 miles southwest of Fond du Lac Post Office.	5.00	11-17-71	0	0
Do	SW 1/4 SW 1/4 sec.5, T.14 N., R.17 E., Fond du Lac County, at site on County Trunk Highway FFF, 5.3 miles south of Fond du Lac Post Office.	1.41	11-16-71	0	0
East Branch Fond du Lac River	NW 1/4 NE 1/4 sec.32, T.15 N., R.17 E., Fond du Lac County, at bridge on country road, 3.7 miles south of Fond du Lac Post Office.	60.6	11-16-71	3.85	.064
East Branch Fond du Lac River tributary	NW 1/4 SE 1/4 sec.5, T.14 N., R.17 E., Fond du Lac County, at site on County Trunk Highway FFF, 4.9 miles south of Fond du Lac Post Office.	1.03	11-16-71	0	0
Do	NE 1/4 SE 1/4 sec.5, T.14 N., R.17 E., Fond du Lac County, at site on County Trunk Highway FFF, 4.7 miles south of Fond du Lac Post Office.	1.24	11-16-71	0	0
Do	SW 1/4 SE 1/4 sec.10, T.14 N., R.17 E., Fond du Lac County, at bridge on State Highway 135, 5.8 miles south of Fond du Lac Post Office.	1.86	11-15-71	.04	.022
Do	NE 1/4 SW 1/4 sec.9, T.14 N., R.17 E., Fond du Lac County, at bridge on County Trunk Highway B, 5.6 miles south of Fond du Lac Post Office.	5.55	11-16-71	1.13	.204
Do	NW 1/4 SW 1/4 sec.4, T.14 N., R.17 E., Fond du Lac County, at bridge on County Trunk Highway FFF, 4.6 miles south of Fond du Lac Post Office.	6.10	11-16-71	1.35	.221

STREAMS TRIBUTARY TO LAKE MICHIGAN

East Branch Fond du Lac River basin low-flow investigation--Continued

Stream	Location	Drainage area (sq mi)	Measured Discharge		
			Date	Cfs	Cfsm
Discharge measurements of East Branch Fond du Lac River and tributaries--Continued					
Tributary to unnamed tributary	NW 1/4 SE 1/4 sec.4, T.14 N., R.17 E., Fond du Lac County, at bridge on County Trunk Highway FFF, 4.6 miles south of Fond du Lac Post Office.	1.37	11-16-71	.40	.292
East Branch Fond du Lac River	NW 1/4 SE 1/4 sec.33, T.15 N., R.17 E., Fond du Lac County, at bridge on country road, 3.8 miles south of Fond du Lac Post Office.	73.0	11-16-71	5.37	.074
East Branch Fond du Lac River tributary	SW 1/4 SE 1/4 sec.34, T.15 N., R.17 E., Fond du Lac County, at bridge on State Highway 135, 3.8 miles south of Fond du Lac Post Office.	1.29	11-15-71	.19	.147
Do	SW 1/4 NE 1/4 sec.34, T.15 N., R.17 E., Fond du Lac County, at site on State Highway 135, 3.3 miles south of Fond du Lac Post Office.	.46	11-15-71	0	0
Do	NW 1/4 NE 1/4 sec.34, T.15 N., R.17 E., Fond du Lac County, at site on State Highway 135, 3.0 miles south of Fond du Lac post office.	.59	11-15-71	0	0
øEast Branch Fond du Lac River	NE 1/4 SW 1/4 sec.22, T.15 N., R.17 E., Fond du Lac County, at County Trunk Highway VV, 1.6 miles south of Fond du Lac Post Office.	77.9	11-17-71	5.87	0.75

DeNevue Creek basin low-flow investigation

A series of base-flow discharge measurements was made in the DeNevue Creek basin during the period November 16-18. In the week prior to the measurements, weather records indicate .01 inch precipitation fell in the area. On the first day of the measurements, about .29 inch of precipitation fell, but this amount is presumed not to have affected base-flow conditions. Based on recorded streamflow data in the region, the discharge measurements are considered to represent medium-range base flow.

Discharge measurements of DeNevue Creek and tributaries					
DeNevue Creek	SE 1/4 SE 1/4 sec.2, T.14 N., R.17 E., Fond du Lac County, at site on country road, 5.1 miles south of Fond du Lac Post Office.	2.62	11-15-71	.06	.023
Do	NE 1/4 SW 1/4 sec.25, T.15 N., R.17 E., Fond du Lac County, at site on country road, 3.0 miles southeast of Fond du Lac Post Office.	5.25	11-16-71	0	0
DeNevue Creek tributary	NW 1/4 NE 1/4 sec.8, T.14 N., R.18 E., Fond du Lac County, at site on County Trunk Highway UU, 6.4 miles southeast of Fond du Lac Post Office.	3.41	11-15-71	.39	.114
Tributary to unnamed tributary	SW 1/4 SE 1/4 sec.6, T.14 N., R.18 E., Fond du Lac County, at site on County Trunk Highway V, 5.7 miles southeast of Fond du Lac Post Office.	.60	11-15-71	.15	.250
DeNevue Creek tributary	NW 1/4 NW 1/4 sec.6, T.14 N., R.18 E., Fond du Lac County, at site on country road, 4.7 miles southeast of Fond du Lac Post Office.	9.08	11-16-71	1.16	.128
Tributary to unnamed tributary	NW 1/4 SW 1/4 sec.30, T.15 N., R.18 E., Fond du Lac County, at site on County Trunk Highway K, 3.5 miles southeast of Fond du Lac Post Office.	.79	11-16-71	.03	.038
DeNevue Creek	NE 1/4 NE 1/4 sec.25, T.15 N., R.17 E., Fond du Lac County, at site on U.S. Highway 45, 3.1 miles southeast of Fond du Lac Post Office.	16.4	11-16-71	1.18	.072
Do	SE 1/4 NE 1/4 sec.14, T.15 N., R.17 E., Fond du Lac County, at site on 4th Street, 1.3 miles east of Fond du Lac Post Office.	18.4	11-16-71	1.17	.064
Do	NW 1/4 SE 1/4 sec.11, T.15 N., R.17 E., Fond du Lac County, at site on State Highway 23 (Johnson Street), 1.0 miles northeast of Fond du Lac Post Office.	18.8	11-16-71	1.11	.059
DeNevue Creek tributary	NW 1/4 NW 1/4 sec.19, T.15 N., R.18 E., Fond du Lac County, at site on County Trunk Highway V, 2.7 miles southeast of Fond du Lac Post Office.	.77	11-16-71	.26	.338
Do	SW 1/4 SW 1/4 sec.12, T.15 N., R.17 E., Fond du Lac County, at site on Division Street, 1.5 miles east of Fond du Lac Post Office.	1.39	11-16-71	.23	.165
Do	SW 1/4 NE 1/4 sec.11, T.15 N., R.17 E., Fond du Lac County, at site on city street, 1.1 miles northeast of Fond du Lac Post Office.	1.75	11-16-71	.20	.114

ø Formerly operated as a continuous-record gaging station.

STREAMS TRIBUTARY TO LAKE MICHIGAN

Neenah Slough basin* low-flow investigations

A series of base-flow discharge measurements was made in the Neenah Slough basin during the period November 15-18. In the week prior to the measurements, weather records indicate only a very small amount of precipitation fell in the area. On the second day of the measurements, less than .2 of an inch of precipitation fell, but this amount is presumed not to have affected base-flow conditions. Based on recorded streamflow data in the region, the discharge measurements are considered to represent medium-range base flow.

Stream	Location	Drainage area (sq mi)	Measured Discharge		
			Date	Cfs	Cfsm
	Discharge measurements of Fox River tributary				
Fox River tributary No. 1	SE 1/4 SE 1/4 sec.2, T.19 N., R.16 E., Winnebago County, at culvert on County Trunk Highway G, 9.0 miles north of Oshkosh.	.26	11-15-71	0	0
Do	SW 1/4 NW 1/4 sec.13, T.19 N., R.16 E., Winnebago County, at culvert on U.S. Highway 45, 7.4 miles north of Oshkosh.	.91	11-15-71	0	0
Tributary No. 1	NW 1/4 SW 1/4 sec.13, T.19 N., R.16 E., Winnebago County, at culvert on U.S. Highway 45, 7.0 miles north of Oshkosh.	.26	11-15-71	0	0
Tributary No. 2	NW 1/4 NE 1/4 sec.24, T.19 N., R.16 E., Winnebago County, at culvert on County Trunk Highway GG, 6.7 miles north of Oshkosh.	1.59	11-15-71	0	0
Fox River tributary No. 1	SW 1/4 NW 1/4 sec.18, T.19 N., R.17 E., Winnebago County, at bridge on Wooden Shoe Road, 7.4 miles north of Oshkosh.	4.02	11-15-71	0	0
Tributary No. 3	SE 1/4 SW 1/4 sec.8, T.19 N., R.17 E., Winnebago County, at culvert on U.S. Highway 41, 4.0 miles southwest of Neenah.	.70	11-16-71	0	0
Tributary No. 4	NW 1/4 NE 1/4 sec.12, T.19 N., R.16 E., Winnebago County, at culvert on County Trunk Highway G, 4.2 miles southwest of Neenah.	.64	11-15-71	0	0
Do	NE 1/4 NE 1/4 sec.12, T.19 N., R.16 E., Winnebago County, at culvert on country road, 4.1 miles southwest of Neenah.	1.17	11-15-71	0	0
Tributary No. 5	NE 1/4 NE 1/4 sec.1, T.19 N., R.16 E., Winnebago County, at culvert on Wooden Shoe Road, 3.8 miles southwest of Neenah.	.38	11-16-71	0	0
Do	NE 1/4 NW 1/4 sec.7, T.19 N., R.17 E., Winnebago County, at bridge on County Trunk Highway G, 4.0 miles southwest of Neenah.	1.16	11-16-71	0	0
Tributary No. 6	NW 1/4 NE 1/4 sec.8, T.19 N., R.17 E., Winnebago County, at culverts on U.S. Highway 41, 3.3 miles south of Neenah.	.61	11-16-71	0	0
Tributary No. 7	SE 1/4 SE 1/4 sec.36, T.20 N., R.16 E., Winnebago County, at culverts on State Highway 114, 3.6 miles southwest of Neenah.	.74	11-16-71	.01**	-
Tributary	SE 1/4 NW 1/4 sec.31, T.20 N., R.17 E., Winnebago County, at culvert on State Highway 114, 3.0 miles west of Neenah.	.41	11-16-71	0	0
Tributary No. 7	NE 1/4 NE 1/4 sec.7, T.19 N., R.17 E., Winnebago County, at bridge on County Trunk Highway G, 3.6 miles southwest of Neenah.	2.17	11-16-71	.1**	-
Fox River tributary No. 1	SE 1/4 NW 1/4 sec.5, T.19 N., R.17 E., Winnebago County, 0.7 mile upstream from U.S. Highway 41, 2.9 miles southwest of Neenah.	13.2	11-17-71	.57	.043
Tributary No. 9	SE 1/4 SE 1/4 sec.30, T.20 N., R.17 E., Winnebago County, at culverts on Pendleton Road, 2.2 miles west of Neenah.	.68	11-16-71	0	0
Do	SE 1/4 NE 1/4 sec.32, T.20 N., R.17 E., Winnebago County, at culvert on U.S. Highway 41, 1.6 miles southwest of Neenah.	1.14	11-17-71	.25	.219
Tributary No. 10	NE 1/4 NW 1/4 sec.33, T.20 N., R.17 E., Winnebago County, at bridge on Harrison Street, 1.1 miles southwest of Neenah.	.67	11-16-71	.07	.104
Fox River tributary No. 1	NW 1/4 SW 1/4 sec.28, T.20 N., R.17 E., Winnebago County, at State Highway 114, at Neenah.	18.1	11-16-71	4.19	.231
Tributary No. 11	NE 1/4 NE 1/4 sec.35, T.20 N., R.16 E., Winnebago County, at culvert on U.S. Highway 45, 4.0 miles west of Neenah.	.21	11-17-71	0	0
Do	NW 1/4 SW 1/4 sec.30, T.20 N., R.17 E., Winnebago County, at culvert on County Trunk Highway S, 3.0 miles west of Neenah.	1.27	11-16-71	0	0
Do	NE 1/4 NE 1/4 sec.30, T.20 N., R.17 E., Winnebago County, at bridge on Pendleton Road, 1.9 miles west of Neenah.	1.81	11-17-71	0	0
Do	SE 1/4 NW 1/4 sec.29, T.20 N., R.17 E., Winnebago County, at culvert on country road, 1.5 miles west of Neenah.	1.96	11-16-71	0	0
Do	SE 1/4 NE 1/4 sec.29, T.20 N., R.17 E., Winnebago County, at culvert on U.S. Highway 41, 1.3 miles west of Neenah.	2.46	11-17-71	1.00a	-
Do	SE 1/4 NE 1/4 sec.29, T.20 N., R.17 E., Winnebago County, at bridge on Green Bay Road, 1.0 miles west of Neenah.	2.56	11-17-71	.26	-

* The main stream in this basin is an unnamed tributary of the Fox River and for this seepage run the area is called the Neenah Slough basin.

** Field estimate.

a Most of flow from quarry sump approximately 1/2 mile above site.

STREAMS TRIBUTARY TO LAKE MICHIGAN

Whitewater Creek basin low-flow investigations

A series of base-flow discharge measurements was made in the Whitewater Creek basin during the period September 24-25, 1971 (not published in 1971 report). In the week prior to the measurements, weather records at Whitewater indicate .83 inch of precipitation September 19 and .02 inch of precipitation September 20 and 23. Based on recorded streamflow data in the region, the discharge measurements are considered to represent low-range base flow.

Stream	Location	Drainage area (sq mi)	Measured Discharge		
			Date	Cfs	Cfsm
	Discharge measurements of Whitewater Creek and tributaries				
Whitewater Creek	SW 1/4 NW 1/4 sec.26, T.4 N., R.15 E., Walworth County, at town road at outlet of Rice Lake, 4.1 miles south of Whitewater.	-	9-24-71	0	0
Whitewater Creek tributary	NW 1/4 NW 1/4 sec.27, T.4 N., R.15 E., Walworth County, at town road, 3.5 miles south of Post Office in Whitewater.	-	9-24-71	1.54	-
Bluff Creek	NE 1/4 NE 1/4 sec.23, T.4 N., R.15 E., Walworth County, at County Trunk Highway P, 3.4 miles southeast of Post Office in Whitewater.	-	9-24-71	9.53	-
Whitewater Creek	NE 1/4 SE 1/4 sec.15, T.4 N., R.15 E., Walworth County, 2.5 miles southeast of Post Office in Whitewater.	-	9-24-71	11.6	-
Whitewater Creek	NE 1/4 SW 1/4 sec.10, T.4 N., R.15 E., Walworth County, at town road, 1.5 miles southeast of Whitewater.	-	9-24-71	10.6	-
Spring Brook	SE 1/4 NE 1/4 sec.22, T.4 N., R.14 E., Rock County, at bridge on State Highway 59 at junction with country road, 0.5 miles northeast of Lima Center.	-	9-25-71	0	0
Do	NE 1/4 SE 1/4 sec.24, T.4 N., R.14 E., Rock County, at bridge on town road, 3.0 miles southwest of Whitewater.	-	9-24-71	1.57	-
Spring Brook tributary	SE 1/4 NE 1/4 sec.36, T.4 N., R.14 E., Rock County, at bridge on country road, 5.4 miles southwest of Whitewater Post Office.	-	9-24-71	<.01	-
Do	NE 1/4 NE 1/4 sec.31, T.4 N., R.15 E., Walworth County, at bridge on town road, 4.7 miles south of Whitewater.	-	9-25-71	.079	-
Spring Brook	NW 1/4 SW 1/4 sec.20, T.4 N., R.15 E., Walworth County, at culvert on country road, 3.1 mile southwest of Whitewater Post Office.	-	9-24-71	1.64	-
Spring Brook tributary	NE 1/4 SE 1/4 sec.18, T.4 N., R.15 E., Walworth County, at culvert on town road, 2.5 miles southwest of Whitewater.	-	9-24-71	0	0
Spring Brook	NW 1/4 SE 1/4 sec.8, T.4 N., R.15 E., Walworth County, at State Highway 89, 1.2 miles southwest of Post Office in Whitewater.	-	9-24-71	2.38	-
Whitewater Creek	NW 1/4 NW 1/4 sec.4, T.4 N., R.15 E., Walworth County, at bridge on private road on county line, 0.6 mile north of Post Office at Whitewater.	-	9-25-71	14.3	-
Whitewater Creek tributary	NW 1/4 NW 1/4 sec.34, T.5 N., R.15 E., Jefferson County, at State Highway 59, 1.7 miles northeast of Post Office in Whitewater.	-	9-25-71	.24	-
Tributary to Whitewater Creek tributary	SE 1/4 SW 1/4 sec.28, T.5 N., R.15 E., Jefferson County, at County Trunk Highway U, 1.7 miles north of Post Office in Whitewater.	-	9-25-71	0	0
Galloway Creek	NE 1/4 SE 1/4 sec.35, T.5 N., R.14 E., Jefferson County, at culvert on town road, 3.5 miles west of Whitewater.	-	9-24-71	0	0
Galloway Creek tributary	NW 1/4 NW 1/4 sec.36, T.5 N., R.14 E., Jefferson County, at bridge on U.S. Highway 12 and State Highway 89, 3.6 miles west of Whitewater.	-	9-24-71	0	0
Do	NE 1/4 NW 1/4 sec.12, T.4 N., R.14 E., Rock County, at bridge on County Trunk N, 3.0 miles west of Whitewater.	-	9-24-71	<.01	-
Do	NW 1/4 NE 1/4 sec.1, T.4 N., R.14 E., Rock County, at bridge on town road, 2.8 miles west of Whitewater.	-	9-25-71	.10	-
Galloway Creek	SE 1/4 NW 1/4 sec.30, T.5 N., R.15 E., Jefferson County, at County Trunk Highway N, 2.9 miles northwest of Whitewater.	-	9-25-71	1.50	-
Galloway Creek tributary	SE 1/4 SW 1/4 sec.24, T.5 N., R.14 E., Jefferson County, at bridge on town road, 4.0 miles northwest of Whitewater.	-	9-24-71	0	0
Do	SE 1/4 NW 1/4 sec.30, T.5 N., R.15 E., Jefferson County, at County Trunk N, 2.8 miles northwest of Whitewater.	-	9-25-71	.006	-
Do	SE 1/4 NW 1/4 sec.6, T.4 N., R.15 E., Walworth County, at bridge on U.S. Highway 12 and State Highway 89, 1.8 miles west of Whitewater.	-	9-24-71	0	0
Tributary to Galloway Creek tributary	SW 1/4 NE 1/4 sec.6, T.4 N., R.16 E., Walworth County, at bridge on U.S. Highway 12 and State Highway 89, at Whitewater.	-	9-25-71	<.01	-
Galloway Creek tributary	NE 1/4 SE 1/4 sec.30, T.5 N., R.15 E., Jefferson County, at culvert on County Trunk N, 2.5 miles northwest of Whitewater.	-	9-25-71	.58	-
Do	SE 1/4 SW 1/4 sec.19, T.5 N., R.15 E., Jefferson County, at culvert on County Trunk N, 3.4 miles northwest of Whitewater.	-	9-25-71	.01	-

PART 2. WATER QUALITY RECORDS

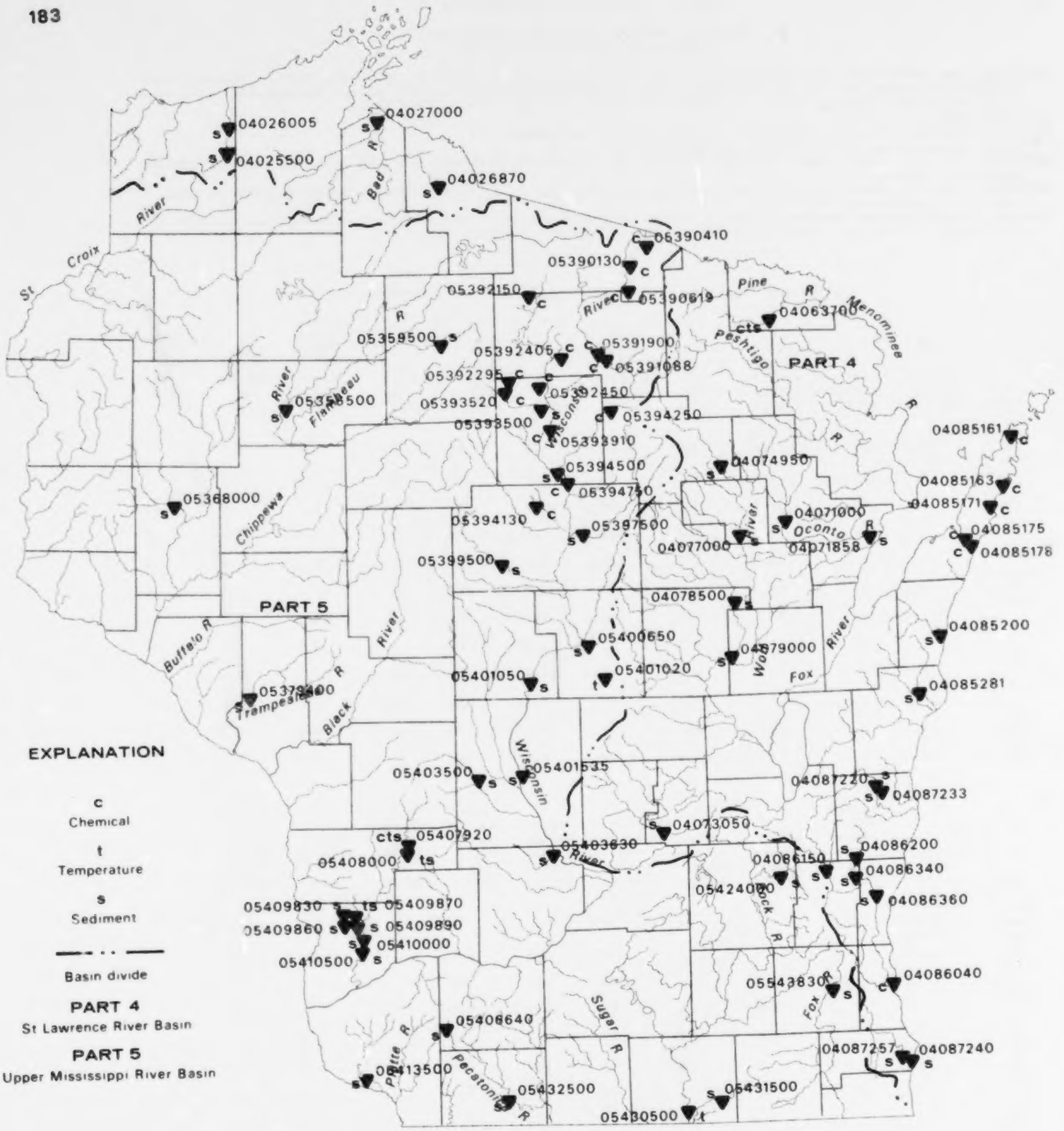

Figure 6. Map of Wisconsin showing location of stations where water-quality data were obtained.

04063700 POPPLE RIVER NEAR FENCE, WIS.
(Hydrologic bench-mark station)

LOCATION.--Lat 45°45'49", long 88°27'47", in NW 1/4 sec.23, T.38 N., R.16 E., Florence County, temperature recorder at gaging station, on left bank 20 ft upstream from bridge on U.S. Forest Service Road 2159, 1.8 miles downstream from Mud Creek, 2.6 miles northwest of Fence, and at mile 11.5.

DRAINAGE AREA.--131 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.
Water temperatures: June 1964 to September 1972.

EXTREMES, 1971-72.--Water temperatures: Maximum, 24.0°C June 8; minimum, freezing point on many days during November to April.

EXTREMES, 1964-72.--Water temperatures: Maximum, 29.0°C July 1, 2, 1970; minimum, freezing point on many days during winter months.

REMARKS.--Miscellaneous samples of chemical data published for water years 1964-67. Laboratory analyses of biological constituents furnished by State Lab of Hygiene, Madison, Wisconsin.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.											
06...	10.0	591	7.8	880	62	6.5	87	15	2.9	1.1	.1
NOV.											
02...	4.5	161	11	740	28	7.4	125	15	8.0	1.6	.1
DEC.											
08...	0.0	83	13	580	990	7.4	200	18	9.7	1.9	.1
JAN.											
12...	0.0	68	14	540	2000	7.3	250	27	8.4	2.7	.1
FEB.											
10...	0.0	46	12	550	69	7.4	202	22	12	2.0	.1
MAR.											
09...	0.0	44	16	430	54	7.3	220	24	12	2.1	.1
APR.											
11...	1.0	80	14	460	46	7.2	161	17	10	1.3	.1
MAY											
10...	11.0	465	4.6	290	22	6.5	65	6.4	4.0	.8	.1
JUNE											
13...	17.0	61	7.6	310	73	7.3	175	20	11	1.4	.1
JULY											
11...	20.5	40	7.0	280	62	7.6	202	23	12	1.4	.1
AUG.											
14...	20.0	95	10	520	7	7.6	145	17	8.0	1.3	.1
SEP.											
11...	14.5	59.1	11	710	70	7.1	154	20	8.7	1.4	.1

DATE	PERCENT SODIUM	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)
OCT.										
06...	4	1.2	38	0	31	17	3.0	.5	.40	.030
NOV.										
02...	5	.7	72	0	59	7.2	2.5	.1	.20	.04
DEC.										
08...	5	.6	96	0	79	8.8	1.5	.1	.20	.03
JAN.										
12...	5	.7	106	0	87	20	2.0	.2	.20	.06
FEB.										
10...	4	1.0	120	0	98	7.2	2.0	.1	.20	.04
MAR.										
09...	4	1.2	126	0	103	7.4	2.0	.2	.80	.02
APR.										
11...	3	.5	94	0	77	6.2	1.0	.2	.30	.02
MAY										
10...	5	.5	30	0	25	1.8	1.0	.3	.20	.13
JUNE										
13...	3	.7	109	0	89	5.4	4.0	.1	.00	.03
JULY										
11...	3	.7	127	0	104	5.4	4.0	.1	.00	.04
AUG.										
14...	4	.5	83	0	68	.8	4.0	.3	.10	.02
SEP.										
11...	3	.6	92	0	75	5.2	3.5	.3	.18	.05

04063700 POPPLE RIVER NEAR FENCE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	COLOR (PLAT-INUM-COBALT UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)
OCT. 06...	136	70	217	.18	50	19	280	4.9	560	<5
NOV. 02...	112	83	48.7	.15	70	12	120	1.8	610	15
DEC. 08...	116	103	26.0	.16	85	6	100	.6	310	<5
JAN. 12...	131	131	24.1	.18	110	20	80	--	400	<5
FEB. 10...	134	119	16.6	.18	100	6	30	1.2	40	<5
MAR. 09...	140	131	16.6	.19	110	6	25	1.5	1000	<5
APR. 11...	116	98	25.1	.16	84	6	50	--	230	<5
MAY 10...	70	35	87.9	.10	32	8	100	1.2	--	--
JUNE 13...	99	105	16.3	.13	95	6	50	6.1	130	5
JULY 11...	116	116	12.5	.16	110	3	40	.9	700	10
AUG. 14...	125	84	32.1	.17	76	8	140	.0	300	20
SEP. 11...	129	97	15.5	.18	86	10	120	.9	2600	5

DATE	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)
MAR. 19...	90	--	7	30	0	0	--
MAY 10...	465	11.0	0	40	0	0	19
AUG. 14...	95	20.0	0	10	0	0	6

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
MAR. 19...	0	<.5	3	0	76	280
MAY 10...	0	<.5	3	0	22	290
AUG. 14...	1	<.5	9	0	7	520

DATE	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	TOTAL ORGANIC CARBON (C) (MG/L)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)
OCT. 06...	10.0	591	--	.00	<.2	.00	<.2	.0	<1.0	.00	<.2	.00
AUG. 14...	19.5	95	28	.00	<.2	.00	<.2	.0	<1.0	.00	<.2	.00

04063700 POPPLE RIVER NEAR FENCE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	PCB (UG/L)	MALA-THION (UG/L)	MALA-THION IN BOTTOM DE-POSITS (UG/KG)	PARA-THION (UG/L)	PARA-THION IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	METHYL PARA-THION (UG/L)	METHYL PARA-THION IN BOT-TOM DE-POSITS (UG/KG)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 06...	<.5	.00	<.2	.00	<.2	.00	.00	<.2	.00	.00	.00
AUG. 14...	--	.00	--	.00	--	.00	.00	--	.00	.00	.00

DATE	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM DE-POSITS (UG/KG)
OCT. 06...	.4	.00	<.2	.00	<.2	.00	<.2	.00	<.2	.00	<.2
AUG. 14...	<.2	.00	<.2	.00	<.2	.00	<.2	.00	<.2	.00	<.2

DATE	TIME	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)
OCT. 06...	1315	.04	2.0	.7	8.4

DATE	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	PH (UNITS)
OCT. 06...	10.0	591	87	10.7	95	6.5
NOV. 02...	4.5	161	125	11.6	90	7.4
DEC. 08...	.0	83	200	10.6	73	7.4
JAN. 12...	0.0	68	250	11.5	79	7.3
FEB. 10...	0.0	46	202	11.6	79	7.4
MAR. 09...	0.0	44	220	10.1	69	7.3
APR. 11...	1.0	80	161	13.4	94	7.2
MAY 10...	11.0	465	65	10.0	81	6.5
JUNE 13...	17.0	61	175	8.5	88	7.3
JULY 11...	20.5	40	202	22.0	25	7.6
AUG. 14...	20.0	95	145	7.8	85	7.6
SEP. 11...	14.5	59	154	9.9	96	7.1

04063700 POPPLE RIVER NEAR FENCE, WIS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	12.0	6.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	15.0	14.0	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	15.5	14.5	4.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	14.5	13.0	3.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	13.0	12.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	12.0	10.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	10.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	9.5	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	9.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	9.0	8.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	8.5	7.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	7.0	5.5	2.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	7.0	6.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	9.0	7.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.0	7.0	4.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	8.0	7.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	9.0	7.0	5.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	9.5	9.0	6.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	11.5	9.5	5.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	11.0	10.0	3.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	11.5	10.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	11.5	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	11.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	11.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	11.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	11.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	9.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	8.5	8.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	0.0	0.0
31	8.5	6.0	---	---	0.0	0.0	0.0	0.0	---	---	0.0	0.0
MONTH	15.5	5.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	0.0	0.0	6.0	5.5	18.0	14.0	21.5	18.5	21.0	18.5	19.5	18.0
2	0.0	0.0	5.5	5.5	20.5	15.5	21.0	18.0	21.0	18.5	19.0	15.5
3	0.0	0.0	6.5	5.0	21.5	16.5	20.0	16.0	20.5	18.0	16.0	13.5
4	0.0	0.0	8.5	6.0	21.0	16.5	16.5	13.5	19.5	15.5	15.5	13.0
5	0.0	0.0	10.0	7.0	20.5	16.5	18.5	14.0	19.5	16.0	16.5	14.5
6	0.0	0.0	10.0	9.5	20.0	15.0	18.5	15.0	19.5	16.5	16.0	14.0
7	0.0	0.0	11.5	9.0	21.5	16.0	18.0	15.0	17.0	14.5	16.5	13.5
8	0.0	0.0	12.0	9.5	24.0	19.0	17.0	14.0	17.0	13.5	16.5	13.5
9	0.0	0.0	12.0	10.0	23.5	18.0	18.0	15.5	14.0	11.5	16.0	13.0
10	0.0	0.0	12.0	10.0	19.0	13.5	20.0	16.0	14.5	11.5	15.5	14.0
11	0.0	0.0	13.5	10.0	18.0	14.0	21.0	19.0	16.0	14.0	15.5	14.0
12	0.0	0.0	14.5	12.0	16.5	14.5	21.5	19.0	19.0	14.5	15.5	13.5
13	0.0	0.0	14.5	12.0	16.5	14.5	21.5	19.0	20.5	16.5	16.5	15.0
14	0.0	0.0	13.0	11.5	18.0	15.5	21.5	19.0	20.0	19.0	16.5	14.0
15	0.0	0.0	14.0	11.5	18.0	14.5	21.0	18.0	19.5	16.5	16.5	13.5
16	0.0	0.0	16.5	12.0	17.0	13.0	20.5	17.0	20.0	18.0	16.0	13.0
17	0.0	0.0	19.0	14.5	19.0	13.5	19.0	16.5	21.5	19.0	15.5	13.0
18	0.0	0.0	20.0	16.0	20.0	14.5	20.5	15.5	21.0	19.5	15.5	14.5
19	0.0	0.0	21.0	16.5	22.0	16.5	21.0	18.0	21.0	19.0	15.5	13.5
20	0.0	0.0	19.5	18.0	22.0	15.5	21.5	20.0	20.5	19.0	15.5	14.5
21	0.0	0.0	21.0	16.5	16.0	13.5	21.5	20.0	21.0	19.5	15.5	13.5
22	0.0	0.0	22.0	18.0	18.0	13.5	23.5	19.5	21.0	18.5	13.5	11.0
23	0.0	0.0	22.0	18.0	16.5	13.5	23.5	21.0	18.5	16.5	12.0	10.5
24	2.0	0.0	22.0	18.5	18.5	13.0	23.0	20.0	18.0	16.0	13.0	12.0
25	3.5	0.5	21.0	18.0	19.0	15.5	21.5	19.0	18.0	16.5	13.0	10.5
26	4.5	2.0	22.0	17.0	21.0	15.5	20.0	16.5	18.0	16.0	10.5	9.5
27	5.0	3.5	23.0	17.0	22.0	18.0	18.5	16.0	18.5	15.5	10.0	9.5
28	6.5	4.5	23.0	18.5	21.5	18.0	18.5	16.5	19.0	16.0	10.0	9.5
29	8.0	5.0	20.5	15.5	21.5	18.0	20.0	16.5	19.0	16.5	9.5	9.0
30	6.5	6.0	16.0	13.5	22.0	18.5	22.0	18.0	20.5	18.0	9.0	8.0
31	---	---	16.0	12.0	---	---	22.0	20.0	20.0	19.0	---	---
MONTH	8.0	0.0	23.0	5.0	24.0	13.0	23.5	13.5	21.5	11.5	19.5	8.0
YEAR	24.0	0.0										

04063700 POPPLE RIVER NEAR FENCE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.				
06...	1215	593	1	1.6
11...	1430	93	2	.50
NOV.				
02...	1250	192	8	4.1
17...	1415	87	4	.94
24...	1730	85	2	.46
DEC.				
02...	1720	.68	6	.01
08...	1230	67	6	1.1
08...	1510	68	4	.73
16...	1330	94	2	.51
22...	0915	80	7	1.5
29...	1230	72	2	.39
JAN.				
04...	1715	64	31	5.4
11...	1220	70	2	.38
12...	1300	68	6	1.1
19...	1430	68	3	.55
25...	1730	60	2	.32
FEB.				
01...	1115	46	2	.25
09...	1130	48	3	.39
16...	1710	49	1	.13
23...	1730	45	12	1.5
MAR.				
02...	1130	44	2	.24
08...	1115	44	1	.12
09...	1200	44	6	.71
11...	1400	166	4	1.8
14...	1730	45	1	.12
20...	1300	106	2	.57
21...	1315	108	4	1.2
22...	1210	140	12	4.5
23...	1330	140	20	7.6
24...	1230	145	6	2.3
25...	1500	142	4	1.5
26...	1210	138	4	1.5
27...	1315	132	5	1.8
28...	1410	142	3	1.2
29...	1330	132	4	1.4
30...	1315	128	3	1.0
31...	1510	116	4	1.3
APR.				
01...	1820	114	2	.62
02...	1130	112	2	.60
03...	1730	128	4	1.4
04...	1810	128	2	.69
05...	1745	114	2	.62
06...	1815	110	2	.59
07...	1845	110	6	1.8
09...	1515	128	4	1.4
10...	1605	88	0	.00
10...	1720	138	4	1.5
11...	1300	80	1	.22
11...	1820	106	6	1.7
12...	1710	108	6	1.7
13...	1800	132	8	2.9
14...	1720	176	8	3.8
15...	1515	203	12	6.6
16...	1710	287	16	12
17...	1045	290	18	14
18...	1545	376	10	10
19...	1545	404	11	12
20...	1330	452	30	37
21...	1100	492	8	11
22...	1500	392	7	7.4
23...	1630	460	5	6.2
24...	1415	484	7	9.1
25...	1330	484	5	6.5
26...	1015	500	6	8.1
27...	1545	565	4	6.1
28...	1330	650	5	8.8
29...	1630	805	6	13
30...	1845	945	6	15
MAY				
01...	0745	985	4	11
01...	1920	1060	7	20
02...	0730	1110	5	15
02...	1815	1120	3	9.1
03...	0715	1120	4	12

04063700 POPPLE RIVER NEAR FENCE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAY				
03...	1915	1090	2	5.9
04...	0700	1040	3	8.4
04...	1930	1010	2	5.5
05...	0715	1000	4	11
05...	2115	880	2	4.8
06...	0815	830	4	9.0
06...	2000	730	2	3.9
07...	1110	700	2	3.8
07...	1915	665	2	3.6
08...	0700	615	2	3.3
08...	2000	570	4	6.2
09...	0700	528	3	4.3
09...	2030	492	4	5.3
10...	1335	420	2	2.3
JUNE				
13...	1300	61	6	.99
AUG.				
14...	1100	95	10	2.6

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
MAY							
03...	1915	1090	2	5.9	0	4	9

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
MAY						
03...	21	34	44	63	82	100

04086040 LAKE MICHIGAN AT MILWAUKEE, WIS.

LOCATION.--Lat 43°04'56", long 87°50'44", SW 1/4 SW 1/4 NW 1/4 sec.12, T.7 N., R.22 E., Milwaukee County, at City of Milwaukee public water supply intake, 1.1 miles offshore and at mile 624.40.
DRAINAGE AREA.--67,900 sq mi. Surface area: 22,400 sq mi.
PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1972.
REMARKS.--Samples are taken from the raw water tap in the Linwood Purification Plant Laboratory. Analyses are performed by purification plant personnel, USGS, and EPA-WQO. Drainage area and surface area provided by EPA-WQO. Station operated by FWQA during period August 1960 to September 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TEMPERATURE (DEG C)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	ORGANIC NITROGEN (N) (MG/L)
OCT.												
04...	6.1	1.7	--	--	130	0	107	0	21	7.5	.2	.05
11...	7.5	1.5	--	--	132	0	108	0	19	7.7	.2	--
18...	9.6	1.1	--	--	126	3	108	2	20	7.6	.2	--
25...	13.0	.7	--	--	116	7	107	4	21	7.7	.2	--
NOV.												
01...	7.6	1.6	--	--	132	0	108	0	21	8.0	.2	.08
08...	7.5	1.3	--	--	130	0	107	0	21	7.6	.1	--
15...	7.4	.6	--	--	118	7	108	4	22	8.4	.2	--
22...	5.4	1.7	--	--	126	3	108	2	20	7.7	.1	--
29...	4.7	1.4	--	--	123	5	109	3	22	--	.2	--
DEC.												
06...	.4	1.8	4.5	1.1	132	0	108	0	18	7.8	.1	.22
13...	3.4	1.7	4.4	1.2	123	5	109	3	23	7.9	.1	--
20...	2.3	1.7	--	--	134	0	110	0	21	8.5	.2	--
28...	2.3	1.8	--	--	130	0	107	0	23	9.8	.1	--
JAN.												
04...	1.8	1.7	--	--	132	0	108	0	20	8.2	.2	.32
10...	1.9	1.4	--	--	131	0	107	0	21	8.0	.2	--
17...	.2	1.4	--	--	124	2	106	1	21	8.2	.2	--
24...	.5	1.8	--	--	131	0	107	0	23	9.8	.2	--
31...	1.0	1.7	--	--	130	0	107	0	20	8.2	.2	--
FEB.												
07...	.2	2.2	--	--	130	0	107	0	22	7.6	.2	--
12...	.5	1.3	--	--	128	0	105	0	20	8.0	.2	--
14...	.4	1.7	--	--	129	3	111	2	21	8.3	.2	--
21...	.2	1.6	--	--	122	5	109	3	21	9.1	.2	--
28...	.3	1.6	--	--	134	0	110	0	24	12	--	--
MAR.												
06...	.4	1.5	--	--	133	0	109	0	23	9.2	.2	.16
13...	.4	1.4	--	--	133	0	109	0	22	10	.2	--
20...	.7	1.6	--	--	132	0	108	0	22	9.2	.2	--
30...	.9	1.3	--	--	132	0	108	0	23	8.0	.2	--
APR.												
03...	1.5	1.3	--	--	133	0	109	0	22	8.3	.2	.30
10...	1.6	1.2	--	--	128	3	110	2	22	8.1	.2	--
17...	2.6	1.0	--	--	124	5	110	3	20	8.3	.1	--
24...	3.2	1.0	--	--	122	5	109	3	22	8.2	.1	--
MAY												
01...	3.1	1.0	--	--	126	3	108	2	22	8.2	.2	.25
08...	3.8	1.1	--	--	122	5	108	3	21	8.0	.1	--

04086040 LAKE MICHIGAN AT MILWAUKEE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	PHOS-PHATE (PO4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS_SOLVED AMMONIA (NH4) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
OCT.											
04...	.01	.23	.00	.00	.00	--	1.0	154	.21	132	26
11...	--	--	.00	--	--	--	1.1	153	.21	131	23
18...	--	--	.00	--	--	--	.70	144	.20	--	--
25...	--	--	.00	--	--	--	.40	146	.20	130	24
NOV.											
01...	.02	.30	.00	.07	.02	--	1.0	146	.20	131	23
08...	--	--	.00	--	--	--	.90	141	.19	130	24
15...	--	--	.00	--	--	--	.90	141	.19	131	23
22...	--	--	.00	--	--	--	1.0	152	.21	131	23
29...	--	--	.00	--	--	--	1.4	152	.21	129	--
DEC.											
06...	.02	.20	.00	.04	.04	--	1.6	155	.21	132	26
13...	--	--	.00	--	--	--	1.0	147	.20	--	--
20...	--	--	.00	--	--	--	1.1	151	.21	131	21
28...	--	--	.00	--	--	--	1.2	149	.20	132	26
JAN.											
04...	.04	.25	.00	.06	.06	--	1.1	144	.20	133	25
10...	--	--	.00	--	--	--	1.0	156	.21	131	23
17...	--	--	.00	--	--	--	.90	148	.20	131	26
24...	--	--	.00	--	--	--	1.2	162	.22	134	27
31...	--	--	.00	--	--	--	1.0	148	.20	130	24
FEB.											
07...	--	--	.00	--	--	--	1.0	155	.21	132	26
12...	--	.32	.10	--	--	--	1.4	143	.19	136	29
14...	--	--	.00	--	--	--	1.1	140	.19	134	24
21...	--	--	.00	--	--	--	1.0	142	.19	133	24
28...	--	--	.00	--	--	--	1.1	156	.21	136	26
MAR.											
06...	.03	.20	.00	.06	.01	--	1.0	157	.21	134	25
13...	--	--	.00	--	--	--	1.0	150	.20	133	24
20...	--	--	.00	--	--	--	1.0	153	.21	131	23
30...	--	--	--	--	--	--	1.1	143	.19	132	24
APR.											
03...	.02	.20	.00	.02	.01	.03	.90	145	.20	132	24
10...	--	--	.00	--	--	--	1.0	148	.20	132	23
17...	--	.14	.00	--	--	--	.60	156	.21	133	23
24...	--	--	.00	--	--	--	1.1	146	.20	132	24
MAY											
01...	.00	.20	.00	.02	.02	.00	.90	151	.21	132	24
08...	--	--	.00	--	--	--	.80	155	.21	128	28

04086040 LAKE MICHIGAN AT MILWAUKEE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	IMME-DIATE COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
04...	1	--	272	7.9	.4	8	10.4	83	47	.04	2.6
11...	1	1	--	8.1	.1	8	10.6	88	36	--	--
18...	1	1	--	8.4	.6	10	11.2	97	14	--	--
25...	1	1	--	8.4	.6	12	10.2	97	26	--	.7
NOV.											
01...	1	1	271	8.1	.4	8	10.4	86	16	.01	--
08...	1	1	--	8.2	.2	8	10.9	91	14	--	--
15...	1	2	--	8.4	.6	6	11.5	95	28	--	--
22...	1	7	--	8.3	--	8	11.6	92	22	--	--
29...	1	5	--	8.4	.6	9	12.2	94	22	--	--
DEC.											
06...	1	2	--	8.3	.4	7	12.4	86	44	.02	--
13...	1	1	--	8.4	1.2	9	12.6	94	90	--	--
20...	--	3	--	8.2	--	11	12.6	91	530	--	--
28...	--	1	--	8.1	--	7	12.5	90	38	--	--
JAN.											
04...	1	4	--	8.3	--	12	12.8	92	16	.16	1.1
10...	1	2	--	8.2	.1	10	13.0	94	2	--	--
17...	1	6	--	8.4	.8	11	13.0	90	20	--	--
24...	1	3	--	8.3	.6	8	13.2	93	14	--	--
31...	1	1	--	8.3	.3	9	--	--	1	--	--
FEB.											
07...	1	1	--	8.3	.7	11	13.5	92	260	--	--
12...	1	11	--	8.3	.5	9	13.3	92	80	--	1.0
14...	1	1	--	8.4	.8	12	14.0	97	1	--	--
21...	1	3	--	8.4	.4	10	13.7	94	1	--	--
28...	1	3	--	8.3	.5	10	13.8	96	3	--	--
MAR.											
06...	1	2	275	8.3	.6	10	14.0	96	19	.03	--
13...	--	3	--	8.3	.7	12	13.7	94	6	--	--
20...	1	2	--	8.3	--	10	13.7	95	4	--	--
30...	1	4	--	8.3	.3	10	13.6	96	13	--	--
APR.											
03...	1	4	--	8.3	.5	11	13.4	96	1	.08	--
10...	1	6	--	8.4	.4	12	13.7	99	23	--	--
17...	1	3	--	8.4	--	10	13.2	97	3	--	--
24...	1	5	--	8.4	.3	11	13.3	99	30	--	--
MAY											
01...	1	2	--	8.4	.6	9	13.4	100	11	.04	--
08...	1	1	--	8.4	.7	11	13.2	101	24	--	--

04086040 LAKE MICHIGAN AT MILWAUKEE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TEMPER-ATURE (DEG C)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON-ATE ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)
MAY												
15...	5.4	.9	--	--	126	3	108	2	23	7.8	.2	--
22...	5.2	.8	--	--	113	5	109	3	21	8.0	.2	--
30...	9.9	.7	--	--	119	7	109	4	22	7.6	.2	--
JUNE												
05...	8.5	.9	4.4	.8	118	7	108	4	19	8.2	.2	.26
12...	7.1	--	--	--	117	7	107	4	19	7.8	.1	--
19...	9.9	--	--	--	117	8	109	5	19	8.3	.2	--
26...	10.0	.8	--	--	117	8	109	5	19	7.8	.2	--
JULY												
03...	11.6	.3	--	--	118	8	110	5	19	7.7	.2	1.1
10...	9.7	--	--	--	--	--	109	--	20	--	.1	--
17...	6.3	--	--	--	133	0	109	0	18	7.8	.1	--
25...	6.6	--	--	--	134	0	110	0	--	8.0	--	--
31...	7.2	1.3	--	--	133	0	109	0	20	8.0	.2	--
AUG.												
07...	9.4	1.0	--	--	--	--	109	--	21	9.0	.1	.32
14...	10.1	--	--	--	133	0	109	0	20	8.8	--	--
22...	8.7	.9	--	--	129	0	106	0	19	8.0	.1	--
28...	9.1	.8	--	--	125	3	107	2	20	8.0	.1	--
SEP.												
05...	16.7	.3	--	--	--	--	--	--	19	8.5	.2	.25
11...	7.0	1.0	--	--	127	0	104	0	19	8.0	--	--
18...	7.9	1.1	--	--	127	0	104	0	19	8.8	.1	--
25...	6.1	--	--	--	128	0	105	0	19	8.0	.2	--

DATE	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	PHOS-PHATE (PO4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS_SOLVED AMMONIA (NH4) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
MAY											
15...	--	--	.00	--	--	--	1.1	148	.20	129	21
22...	--	--	.00	--	--	--	--	144	.20	128	27
30...	--	--	.00	--	--	--	.89	145	.20	130	21
JUNE											
05...	.11	.10	.00	.04	.02	--	.70	146	.20	128	20
12...	--	--	--	--	--	--	--	149	.20	131	24
19...	--	--	.00	--	--	--	--	142	.19	132	22
26...	--	--	.00	--	--	--	.70	151	.21	132	22
JULY											
03...	.04	.20	.00	.17	.04	.05	.90	152	.21	129	19
10...	--	--	.00	--	--	--	--	150	.20	132	--
17...	--	--	.00	--	--	--	--	152	.21	132	23
25...	--	--	.00	--	--	--	--	144	.20	133	22
31...	--	--	.00	--	--	--	1.1	156	.21	133	24
AUG.											
07...	.02	.20	.00	.03	.02	--	.90	145	.20	134	25
14...	--	--	--	--	--	--	1.4	151	.21	134	25
22...	--	--	.00	--	--	--	.90	153	.21	133	28
28...	--	--	.00	--	--	--	--	159	.22	133	23
SEP.											
05...	.10	.10	.00	.06	.02	--	--	157	.21	--	--
11...	--	--	.00	--	--	--	--	157	.21	133	29
18...	--	--	.00	--	--	--	1.7	158	.21	133	28
25...	--	--	--	--	--	--	1.5	156	.21	130	25

04086040 LAKE MICHIGAN AT MILWAUKEE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	IMMEDIATE COLIFORM (COL. PER 100 ML)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
MAY											
15...	--	2	--	8.5	.9	12	12.8	101	37	--	--
22...	1	1	--	8.4	.8	10	12.8	100	41	--	--
30...	1	1	--	8.6	--	10	12.3	109	12	--	--
JUNE											
05...	1	1	266	8.5	.4	9	12.3	105	29	.03	--
12...	--	1	--	8.5	.6	9	12.4	102	13	--	--
19...	--	1	--	8.5	--	9	11.7	103	18	--	--
26...	--	1	--	8.5	.5	8	11.4	101	18	--	--
JULY											
03...	--	1	266	8.6	.4	11	11.7	107	18	.00	--
10...	1	1	--	8.5	.5	8	11.3	98	52	--	--
17...	1	1	--	8.3	.8	9	11.4	109	120	--	--
25...	1	1	--	8.2	--	9	11.7	96	610	--	--
31...	1	1	--	8.2	.7	8	11.4	94	36	--	--
AUG.											
07...	1	3	270	8.4	1.1	9	10.8	94	470	.04	--
14...	1	1	--	8.3	.6	9	10.7	95	400	--	--
22...	1	1	--	8.2	.7	6	10.9	94	130	--	1.3
28...	1	1	--	8.5	.5	9	9.1	78	1300	--	--
SEP.											
05...	--	1	265	8.5	--	--	9.5	97	--	.01	--
11...	--	1	--	7.9	.2	12	10.6	88	1500	--	--
18...	1	1	--	8.0	.5	11	10.4	87	440	--	--
25...	--	1	--	8.0	.6	20	10.7	86	3500	--	--

05401020 TENMILE CREEK DITCH 5, NEAR BANCROFT, WIS.

LOCATION.--Lat 44°18'08", long 89°32'59", in NE 1/4 sec.16, T.21 N., R.8 E., Portage County, temperature recorder at gaging station at bridge on country road, 1.3 miles west of U.S. Highway 51, and 1.7 miles southwest of Bancroft.

DRAINAGE AREA.--8.8 sq mi, approximately.

PERIOD OF RECORD.--Water temperatures: June 1965 to September 1972.

EXTREMES, 1971-72.--Water temperatures: Maximum, 17.0°C May 19, 20, 21; minimum, freezing point on many days during December to February.

EXTREMES, 1965-72.--Water temperatures: Maximum, 21.0°C July 1, 1970; minimum, freezing point on many days during winter months in 1965-67, 1970-72.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	15.0	8.5	7.0	3.5	2.0	3.0	1.5	1.0	1.0	3.5	1.5
2	15.5	13.5	9.0	8.0	4.0	2.0	3.0	1.5	1.5	1.0	2.0	1.0
3	15.0	13.5	9.0	7.0	4.0	4.0	1.5	1.5	1.5	1.0	1.0	1.0
4	13.5	11.0	8.5	7.0	4.0	3.0	1.5	1.5	1.0	1.0	1.0	1.0
5	12.0	10.5	9.0	8.0	5.5	4.0	1.5	1.0	1.0	1.0	1.0	1.0
6	11.5	10.5	8.5	5.0	6.0	5.5	1.5	1.5	1.0	1.0	1.0	1.0
7	10.5	8.5	5.0	4.5	6.0	6.0	1.5	1.5	1.0	1.0	1.0	1.0
8	11.0	10.0	5.5	5.0	6.0	6.0	3.0	1.5	1.0	1.0	1.0	0.5
9	10.5	9.5	6.5	5.5	6.0	5.5	3.5	3.0	1.0	0.5	0.5	0.5
10	10.0	9.0	7.0	6.0	6.0	5.5	3.5	3.0	0.5	0.5	1.0	0.5
11	10.0	8.5	8.0	6.5	6.0	4.5	3.0	1.5	0.5	0.5	3.0	1.0
12	9.5	7.0	8.5	7.0	5.0	3.5	2.0	1.0	1.0	0.5	4.0	3.0
13	10.5	9.5	8.5	7.0	3.5	3.0	2.0	0.5	1.5	1.0	4.0	3.0
14	11.0	9.5	9.5	7.0	4.5	3.5	0.5	0.5	3.0	1.5	5.0	3.5
15	11.0	9.5	9.5	8.5	4.5	4.5	0.5	0.5	3.0	2.0	5.0	4.0
16	11.0	9.5	8.5	8.0	4.5	4.5	0.5	0.5	2.0	1.0	5.0	4.5
17	12.0	10.5	10.0	8.5	4.5	2.0	0.5	0.5	3.0	1.0	6.5	4.5
18	13.5	11.5	10.0	8.5	2.0	2.0	1.0	0.5	3.0	1.0	6.0	4.0
19	14.0	13.5	8.5	8.5	3.5	2.0	1.0	0.0	1.0	1.0	6.0	4.5
20	14.0	11.5	6.0	5.0	3.5	3.0	0.5	0.5	1.0	1.0	8.0	5.5
21	13.5	12.0	5.0	4.0	3.5	3.5	1.0	0.5	1.5	1.0	5.5	4.0
22	14.0	13.0	4.0	3.0	3.5	3.0	2.0	1.0	1.5	1.0	4.0	4.0
23	13.5	11.5	4.5	3.5	5.0	3.5	1.5	0.5	1.5	1.0	4.5	3.5
24	11.5	11.0	5.0	4.0	5.0	4.0	0.5	0.5	1.5	1.5	5.0	3.5
25	12.0	11.0	5.5	5.0	4.5	3.5	0.5	0.5	1.5	1.5	5.5	4.0
26	13.0	11.5	5.5	4.5	4.5	3.0	0.5	0.5	1.5	1.0	5.0	4.0
27	13.0	11.5	4.5	4.5	3.5	2.0	0.5	0.5	2.0	1.0	5.5	4.0
28	11.5	9.0	4.5	4.0	2.0	1.5	0.5	0.0	3.5	2.0	5.5	5.0
29	10.5	9.5	4.5	3.5	2.0	1.5	0.0	0.0	3.5	3.0	5.5	4.0
30	12.0	10.5	4.0	3.5	2.0	1.5	0.0	0.0	---	---	5.5	3.5
31	12.0	8.5	---	---	1.5	1.5	0.0	0.0	---	---	6.5	3.5
MONTH	16.0	7.0	10.0	3.0	6.0	1.5	3.5	0.0	3.5	0.5	8.0	0.5

05401020 TENMILE CREEK DITCH 5, NEAR BANCROFT, WIS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	4.0	10.5	9.5	14.0	10.5	13.5	11.5	13.5	13.0	12.0	12.0
2	6.0	4.5	9.5	8.5	15.0	11.5	13.5	13.0	13.0	13.0	12.0	12.0
3	6.0	5.0	11.5	8.5	16.0	13.0	13.5	11.5	13.0	13.0	12.0	11.5
4	5.0	2.0	11.0	8.5	16.0	13.0	11.5	10.5	13.0	12.0	11.5	11.0
5	6.0	3.5	11.5	8.5	15.0	12.0	10.5	10.0	12.0	11.5	11.0	11.0
6	6.0	5.0	11.5	10.0	15.0	11.5	10.5	10.0	12.0	12.0	11.0	11.0
7	5.0	2.0	11.5	8.0	14.5	11.0	10.5	10.5	12.0	11.5	11.0	11.0
8	5.5	2.0	11.5	7.0	15.0	12.0	10.5	10.0	11.5	11.5	11.0	11.0
9	5.5	4.5	13.0	8.5	15.0	13.5	11.0	10.5	11.5	10.5	11.0	11.0
10	8.5	5.0	13.5	9.0	13.5	9.5	12.0	11.0	10.5	10.5	11.0	11.0
11	6.0	4.0	13.5	10.0	12.0	9.5	13.5	12.0	11.0	11.0	11.0	11.0
12	5.5	4.5	15.0	10.5	13.5	11.0	13.5	13.5	11.5	11.0	11.0	11.0
13	5.5	4.5	14.0	11.0	14.5	13.0	13.5	13.0	12.0	11.5	11.0	11.0
14	5.0	5.0	12.0	10.5	14.5	14.5	13.5	13.0	13.0	12.0	11.0	11.0
15	6.5	5.0	13.5	10.0	14.0	11.5	13.0	13.0	13.0	13.0	10.5	10.0
16	8.0	5.5	15.5	10.5	13.5	10.5	14.0	13.0	13.0	13.0	10.0	10.0
17	9.0	5.5	16.5	12.0	11.5	9.0	13.5	13.0	13.5	13.0	10.0	10.0
18	9.5	8.0	16.5	12.0	13.0	10.5	13.5	13.0	14.0	13.5	10.0	10.0
19	9.0	6.5	17.0	13.0	14.0	11.5	13.5	13.0	14.5	14.0	10.0	10.0
20	9.5	6.5	17.0	13.5	14.0	12.0	14.5	13.5	14.5	14.5	10.0	10.0
21	9.5	5.0	17.0	14.0	12.0	10.0	15.0	14.5	14.5	14.5	10.5	10.0
22	5.5	5.0	16.5	13.5	11.5	10.0	16.0	15.0	14.5	14.0	10.5	10.0
23	6.0	5.0	16.5	13.0	11.0	9.0	16.0	15.5	14.0	13.5	10.0	9.5
24	9.0	6.0	16.5	13.5	11.0	9.5	15.5	14.5	13.5	13.0	9.5	9.5
25	9.5	6.0	16.5	13.5	11.5	10.0	15.0	14.0	13.0	12.0	9.5	9.5
26	10.5	7.0	16.5	13.5	12.0	10.5	14.0	13.0	12.0	12.0	9.5	9.5
27	10.5	8.0	16.5	13.5	13.0	11.0	12.0	11.5	12.0	12.0	9.5	9.5
28	10.5	9.0	16.0	13.5	13.0	11.5	11.5	11.5	12.0	12.0	9.5	9.5
29	10.5	9.0	15.5	13.5	12.0	10.0	12.0	11.5	12.0	12.0	9.5	9.5
30	10.5	9.5	14.0	10.5	13.5	11.0	13.5	12.0	12.0	12.0	9.5	9.0
31	---	---	13.0	9.5	---	---	13.5	13.5	12.0	12.0	---	---
MONTH	10.5	2.0	17.0	7.0	16.0	9.0	16.0	10.0	14.5	10.5	12.0	9.0

05407920 KICKAPOO RIVER NEAR ROCKTON, WIS.

LOCATION.--Lat 43°36'46", long 90°37'34", in SE 1/4 SW 1/4 sec.9, T.13 N., R.2 W., Vernon County, at bridge on State Highway 131, and 2.0 miles southwest of Rockton.

DRAINAGE AREA.--264 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: November 1971 to September 1972.
Water temperatures: November 1971 to September 1972.
Sediment records: November 1971 to September 1972.

EXTREMES, 1971-72.--Water temperatures: Maximum 25.0°C August 20, 1972; minimum, freezing point on many days during winter period.

Sediment discharges: Maximum daily, 4,300 tons March 20, 1972; minimum daily, 0.65 tons February 18, March 10, 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	PH (UNITS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
DEC. 02...	.0	--	11	30	110	8.1	460	59	28	2.7
JAN. 05...	.0	102	14	20	86	7.6	525	64	34	3.2
FEB. 03...	.0	104	11	10	67	7.7	428	57	24	2.2
MAR. 09...	.0	124	10	60	130	7.4	449	48	31	2.0
APR. 07...	6.0	268	7.8	480	270	8.0	276	28	17	2.7
MAY 04...	13.0	161	8.7	100	190	8.1	429	43	32	2.9
JUNE 02...	17.0	103	7.4	30	86	7.7	438	48	30	2.4
JULY 06...	17.0	87	7.4	70	63	8.0	436	49	29	2.3
AUG. 09...	14.0	123	11	20	44	7.9	424	54	26	2.8
SEP. 14...	16.0	269	10	90	45	7.0	360	54	15	2.5

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
DEC. 02...	.1	2	1.4	299	0	245	17	3.8	.1	.70
JAN. 05...	.1	2	1.2	322	0	264	25	8.0	.2	--
FEB. 03...	.1	2	1.0	274	0	225	15	3.0	.1	.60
MAR. 09...	.1	2	1.2	272	0	223	16	4.0	.2	.80
APR. 07...	.1	4	5.9	146	0	120	14	6.0	.2	1.2
MAY 04...	.1	3	2.0	268	0	220	19	3.0	.2	.30
JUNE 02...	.1	2	1.5	277	0	227	15	4.0	.2	.30
JULY 06...	.1	2	1.5	278	0	228	11	8.8	.3	.20
AUG. 09...	.1	2	2.7	270	0	221	16	4.0	.2	.60
SEP. 14...	.1	3	6.6	206	0	169	19	7.0	.2	1.0

05407920 KICKAPOO RIVER NEAR ROCKTON, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	COLOR (PLAT-INUM-COBALT UNITS)	BI CHEM ICA OX (MG	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)
DEC.										
02...	276	273	--	.38	260	17	5	1.1	2000	150
JAN.										
05...	302	313	84.6	.41	300	36	10	--	--	--
FEB.										
03...	254	252	71.0	.35	240	16	7	1.0	3000	60
MAR.										
09...	245	251	82.9	.33	248	24	5	.8	1500	10
APR.										
07...	177	163	123	.24	140	20	35	6.8	50000	700
MAY										
04...	228	245	103	.31	240	19	5	1.8	100	<10
JUNE										
02...	258	246	70.0	.35	240	16	4	1.5	2500	55
JULY										
06...	246	247	57.8	.33	240	13	5	--	--	--
AUG.										
09...	246	253	88.8	.33	240	20	5	--	12000	400
SEP.										
14...	216	221	159	.29	200	26	25	--	--	--

DATE	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)
JAN.											
05...	.00	.0	.00	.0	E.0	E.0	.00	.0	.00	.0	.00
APR.											
06...	.00	.0	.00	.0	E.0	E.0	.00	.0	.00	.0	.00

DATE	DI-AZINON (UG/L)	METHYL PARA-THION (UG/L)	2,4-D (UG/L)	2,4-D IN BOTTOM DE-POSITS (UG/KG)	2,4,5-T (UG/L)	2,4,5-T IN BOTTOM DE-POSITS (UG/KG)	SILVEX (UG/L)	SILVEX IN BOTTOM DE-POSITS (UG/KG)	TRI-THION (UG/L)	METHYL TRI-THION (UG/L)
JAN.										
05...	.00	.00	.00	.0	.00	.0	.00	.0	.00	.00
APR.										
06...	.00	.00	.00	--	.00	--	.00	--	.00	.00

DATE	DDT IN BOTTOM DE-POSITS (UG/KG)	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	ETHION (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	MALA-THION (UG/L)	PARA-THION (UG/L)
JAN.										
05...	.0	.00	.0	.00	.0	.00	.00	.0	.00	.00
APR.										
06...	.0	.00	.0	.00	.0	.00	.00	.0	.00	.00

E Estimated value.

05407920 KICKAPOO RIVER NEAR ROCKTON, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	PH (UNITS)	TUR-BID-ITY (JTU)
NOV.							
24...	1415	1.5	440	12.4	89	8.0	8
DEC.							
02...	1100	.0	470	13.2	90	8.1	4
08...	1200	4.0	450	12.6	96	7.9	6
16...	1330	1.0	320	5.4	38	8.2	45
22...	0900	.0	450	6.6	45	8.5	9
31...	0900	.0	450	11.5	79	8.4	6
JAN.							
05...	1400	.0	520	11.0	78	7.6	5
12...	1200	.5	440	10.1	69	8.4	6
19...	1630	.0	405	9.1	62	7.4	4
27...	1000	.0	420	9.1	62	8.2	5
FEB.							
03...	1000	.0	430	9.6	66	8.1	7
09...	1100	.0	450	10.3	71	8.0	2
16...	1330	.0	430	10.6	73	7.9	3
24...	1130	.0	430	7.6	52	7.8	3
29...	1200	.0	440	6.8	47	8.8	8
MAR.							
09...	0930	.0	440	12.4	85	7.1	5
16...	1130	1.0	260	11.3	80	8.4	27
30...	1200	3.0	440	12.6	93	8.6	7
APR.							
07...	1030	6.0	276	11.1	88	8.0	30
13...	0900	3.5	200	11.0	82	8.6	320
21...	1030	8.5	420	104	89	8.0	20
27...	0900	9.5	460	11.1	97	8.6	9
MAY							
04...	1200	13.0	470	11.2	106	8.3	8
10...	1130	13.0	440	11.2	106	8.2	3
18...	1930	21.5	435	10.0	112	8.1	
24...	0930	22.0	450	10.0	114	8.0	
JUNE							
02...	1000	17.0	470	8.7	90	8.2	3
08...	1030	18.5	440	8.3	88	8.1	15
15...	1115	18.5	390	9.3	102	8.3	40
21...	1245	16.5	450	9.6	98	8.1	4
29...	1200	21.0	420	7.9	89	7.6	20
JULY							
06...	0945	17.0	436	10.6	110	8.0	
07...	--	--	330	--	--	--	5
14...	1245	17.0	420	8.4	87	8.1	
15...	1100	18.5	390	9.3	110	8.3	
18...	1000	18.0	380	7.5	79	7.7	50
28...	0945	16.5	410	8.2	84	8.2	30
AUG.							
03...	1300	19.0	450	8.5	90	7.9	10
09...	0900	14.0	424	9.0	86	7.9	6
17...	0945	22.0	440	7.0	80	7.8	10
25...	0930	17.0	370	8.6	89	7.7	20
30...	1230	20.5	415	7.2	79	8.5	15
SEP.							
06...	1000	16.5	370	8.8	90	8.1	15
14...	1000	16.0	300	8.4	84	7.9	150
22...	1300	14.5	340	9.1	88	8.1	9
29...	1135	12.0	205	8.5	79	7.8	130

05407920 KICKAPOO RIVER NEAR ROCKTON, WIS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Read once daily

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	0.5	0.5	4.0	14.0	12.0	---	18.5	18.5
2	---	---	---	1.0	0.5	0.5	3.5	11.5	15.5	20.0	18.0	17.0
3	---	---	---	0.5	0.0	0.5	3.5	14.5	18.0	17.0	18.0	14.5
4	---	---	---	---	0.5	0.5	3.5	13.0	---	---	19.5	14.0
5	---	---	---	0.0	0.5	0.5	6.0	14.0	19.0	14.5	14.5	14.5
6	---	---	---	0.0	0.5	0.5	6.0	---	17.0	14.5	18.0	15.5
7	---	---	4.0	1.0	0.5	0.5	1.5	11.0	17.0	15.5	18.5	18.0
8	---	---	4.5	1.0	0.5	0.5	4.5	14.5	17.0	14.0	16.0	16.0
9	---	---	4.5	1.0	0.5	0.0	3.5	---	19.5	---	12.0	14.0
10	---	---	4.5	1.0	0.5	0.5	9.0	13.5	13.0	18.5	14.0	15.0
11	---	---	3.5	1.5	0.5	0.5	8.0	16.5	---	19.5	---	16.0
12	---	---	3.0	0.5	0.5	1.5	---	18.0	16.5	---	18.0	15.5
13	---	---	2.0	0.0	0.5	1.0	3.5	---	19.0	---	---	16.5
14	---	---	1.0	0.5	0.5	2.0	5.5	---	20.5	20.0	23.0	15.0
15	---	---	2.0	0.5	0.5	1.0	5.5	19.0	20.5	18.0	20.0	13.5
16	---	---	2.0	0.5	0.5	1.0	9.0	20.0	20.5	18.5	21.0	14.5
17	---	---	0.5	0.5	0.5	2.0	13.0	21.0	13.5	18.5	21.5	16.0
18	---	---	0.5	0.5	0.5	1.0	14.0	21.5	---	17.0	22.0	17.0
19	---	7.0	0.5	0.5	0.5	1.5	10.0	23.0	16.5	17.0	24.0	---
20	---	5.5	0.5	0.5	0.5	1.5	11.5	18.5	19.5	20.0	25.0	18.5
21	---	3.5	0.5	0.5	0.5	---	8.5	18.0	14.0	21.5	21.0	16.5
22	---	1.0	0.0	0.5	0.5	1.5	5.0	18.5	13.5	23.0	20.0	12.5
23	---	0.5	0.5	0.5	0.5	3.0	5.5	18.0	13.5	21.0	18.5	---
24	---	---	1.0	0.5	---	3.0	10.0	18.5	15.0	21.0	16.5	15.0
25	---	1.5	1.0	0.5	0.5	4.5	12.0	18.0	15.5	19.5	17.0	16.0
26	---	2.0	1.0	0.5	0.5	3.0	---	18.5	20.0	---	16.5	---
27	---	2.0	1.0	0.0	0.5	3.0	9.5	17.0	24.0	16.0	18.0	---
28	---	1.5	1.0	---	0.5	4.0	11.5	20.0	20.5	16.0	16.5	13.5
29	---	1.5	1.5	---	0.5	3.0	12.0	19.5	17.0	16.0	18.5	13.0
30	---	1.0	1.5	0.5	---	3.0	---	15.0	18.5	---	20.5	8.5
31	---	---	1.0	0.5	---	4.0	---	11.0	---	19.5	20.0	---

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	--	--	--
2	--	--	--	--	--	--
3	--	--	--	--	--	--
4	--	--	--	--	--	--
5	--	--	--	--	--	--
6	--	--	--	--	--	--
7	--	--	--	128	20	6.9
8	--	--	--	137	18	6.7
9	--	--	--	146	20	7.9
10	--	--	--	147	26	10
11	--	--	--	163	30	13
12	--	--	--	--	--	--
13	--	--	--	145	12	4.7
14	--	--	--	170	16	7.3
15	--	--	--	261	182	128
16	--	--	--	272	143	105
17	--	--	--	--	--	--
18	--	--	--	--	--	--
19	384	24	25	--	--	--
20	260	15	11	--	--	--
21	242	8	5.2	--	--	--
22	307	10	8.3	147	4	1.6
23	322	8	7.0	--	--	--
24	118	34	11	--	--	--
25	256	20	14	--	--	--
26	263	25	18	--	--	--
27	139	43	16	--	--	--
28	125	14	4.7	--	--	--
29	128	42	15	--	--	--
30	125	14	4.7	--	--	--
31	--	--	--	--	--	--

05407920 KICKAPOO RIVER NEAR ROCKTON, WIS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	105	10	2.8	115	12	3.7
2	110	10	3.0	105	12	3.4	112	6	1.8
3	--	--	--	104	7	2.0	112	8	2.4
4	--	--	--	104	10	2.8	112	6	1.8
5	102	16	4.4	103	12	3.3	120	4	1.3
6	106	18	5.2	104	14	3.9	128	5	1.7
7	110	--	--	105	--	--	128	2	.69
8	118	15	4.8	105	23	6.5	124	2	.67
9	120	24	7.8	106	4	1.1	124	2	.67
10	122	10	3.3	107	5	1.4	120	2	.65
11	120	18	5.8	108	6	1.7	130	2	.70
12	118	16	5.1	110	4	1.2	140	26	9.8
13	112	54	16	112	9	2.7	180	31	15
14	--	--	--	118	5	1.6	250	203	137
15	--	--	--	122	4	1.3	300	187	151
16	105	88	25	124	6	2.0	450	217	264
17	115	71	22	122	4	1.3	580	241	377
18	125	28	9.5	120	2	.65	760	524	1080
19	142	22	8.4	114	8	2.5	960	734	1900
20	135	14	5.1	110	--	--	1560	1020	4300
21	130	18	6.3	108	9	2.6	1920	544	2820
22	122	17	5.6	106	6	1.7	1470	677	2690
23	120	14	4.5	106	7	2.0	258	134	93
24	118	18	5.7	108	6	1.7	229	65	40
25	114	--	--	112	5	1.5	229	72	45
26	110	--	--	120	10	3.2	232	75	47
27	108	--	--	122	5	1.6	176	34	16
28	107	--	--	120	5	1.6	172	43	20
29	107	--	--	122	10	3.3	179	34	16
30	107	14	4.0	--	--	--	161	24	10
31	106	22	6.3	--	--	--	159	31	13

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	162	30	13	218	98	58	104	32	9.0
2	151	31	13	216	67	39	103	42	12
3	154	22	9.1	182	40	20	99	46	12
4	147	20	7.9	161	32	14	--	--	--
5	154	35	15	150	26	11	107	80	23
6	244	129	85	--	--	--	118	109	35
7	268	395	286	144	20	7.8	101	87	24
8	163	74	33	131	19	6.7	100	93	25
9	210	86	49	--	--	--	100	96	26
10	177	61	29	124	22	7.4	108	92	27
11	282	278	212	121	22	7.2	--	--	--
12	--	--	--	124	26	8.7	103	85	24
13	1380	2150	8010	--	--	--	120	124	40
14	336	294	267	--	--	--	145	160	63
15	310	202	169	143	42	16	162	174	76
16	324	230	201	125	30	10	119	112	36
17	270	149	109	116	30	9.4	113	82	25
18	239	131	85	114	--	--	--	--	--
19	220	92	55	112	30	9.1	106	89	25
20	190	60	31	111	35	10	107	114	33
21	307	72	60	111	30	9.0	108	77	22
22	678	786	1440	109	34	10	104	78	22
23	310	124	104	105	34	9.6	100	66	18
24	224	96	58	103	36	10	100	63	17
25	195	64	34	102	40	11	99	68	18
26	--	--	--	102	32	8.8	98	39	10
27	168	54	24	101	32	8.7	97	26	6.8
28	157	44	19	98	22	5.8	100	34	9.2
29	162	38	17	106	30	8.6	121	150	49
30	157	38	16	120	68	22	113	84	26
31	--	--	--	116	40	13	--	--	--

05407920 KICKAPOO RIVER NEAR ROCKTON, WIS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	110	90	27	124	73	24
2	118	87	28	129	106	37	122	54	18
3	100	65	18	122	75	25	115	38	12
4	--	--	--	105	50	14	113	38	12
5	93	52	13	102	64	18	113	48	15
6	92	56	14	107	82	24	111	46	14
7	96	58	15	185	201	100	111	34	10
8	97	61	16	136	100	37	111	47	14
9	--	--	--	123	66	22	108	38	11
10	104	72	20	115	46	14	105	40	11
11	96	57	15	--	--	--	112	26	7.9
12	--	--	--	122	80	26	111	47	14
13	--	--	--	106	56	16	836	780	1761
14	116	66	21	101	34	9.3	269	235	171
15	105	70	20	109	86	25	162	99	43
16	97	50	13	108	76	22	147	68	27
17	111	102	31	102	76	21	130	51	18
18	125	282	95	99	72	19	129	58	20
19	120	92	30	162	204	89	--	--	--
20	112	79	24	130	224	79	245	256	169
21	105	102	29	483	720	939	159	84	36
22	129	147	51	158	226	96	145	55	22
23	223	882	531	151	182	74	--	--	--
24	169	168	77	131	86	30	152	33	14
25	110	102	30	129	68	24	1100	741	2201
26	270	--	--	252	187	127		--	
27	496	382	512	261	154	109		--	
28	154	125	52	172	81	38	427	180	208
29	128	84	29	139	70	26		1070	
30	--	--	--	124	57	19	424	187	214
31	112	82	25	123	68	23	--	--	--

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
JAN. 13...	--	.5	112	28	8.5	10	14	21
APR. 13...	1400	3.5	1050	1810	5130	36	50	60
JULY 14...	1030	17.0	98	71	19	24	26	30

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
JAN. 13...	29	42	52	61	85	89	100
APR. 13...	75	93	98	99	100	--	--
JULY 14...	38	65	90	97	100	--	--

DATE	TIME	TEMPER-ATURE (DEG C)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
JAN. 05...	1530	--	1	11	71	97	99	100	--
JUNE 04...	1215	--	8	31	65	91	99	99	100
JULY 14...	1030	17.0	10	18	43	90	99	99	100

05407950 Kickapoo River near LaFarge, Wis.

This station was operated for two months, then moved 2.5 miles upstream to site 05407920 in December 1972. Backwater conditions exist at this station due to a small powerplant downstream.

DATE	DIS-CHARGE (CFS)	TEM-PER-ATURE (°C)	SIL-ICA (SiO_2) (MG/L)	DIS-SOLVED IRON (Fe) (UG/L)	DIS-SOLVED MAN-GANESE (Mn) (UG/L)	DIS-SOLVED CAL-CIUM (Ca) (MG/L)	SODIUM (Na) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO_3) (MG/L)	CAR-BONATE (CO_3) (MG/L)	SULFATE (SO_4) (MG/L)	CHLO-RIDE (Cl) (MG/L)
OCT. 06...	13.93	7.0	13	40	56	62	1.9	1.8	290	0	15	3.0
NOV. 04...	13.22	4.9	11	30	55	54	2.4	3.4	270	0	20	5.0

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180° C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	COLOR (PLAT-INUM COBALT UNITS)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	NITRATE (NO_3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	pH
OCT. 06...	0.1	253	265	250	12	3	--	0.17	0.22	8.0
NOV. 04...	0.2	249	256	240	20	7	0.50	--	0.24	7.8

DATE	TYPE	TIME	DI-AZINON (UG/L)	ETHION (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	METHYL TRI-THION (UG/L)	PARA-THION (UG/L)	TRI-THION (UG/L)	CHLOR-DANE (UG/L)	ALDRIN (UG/L)	DDD (UG/L)
NOV. 04...	2	1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

DATE	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE IN BOTTOM DE-POSITS (UG/KG)
NOV. 04...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

DATE	DDT IN BOTTOM DE-POSITS (UG/KG)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)
NOV. 04...	0.00	0.30	0.00	0.00	0.00	E3.0

DATE	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)
OCT. 06...	0	0	0	3	6	4	4	1	50	0

05408000 KICKAPOO RIVER AT LA FARGE, WIS.

LOCATION.--Lat 43°34'27", long 90°38'35", temperature recorder on east-west quarter section line in W 1/2 sec. 29, T.13 N., R.2 W., Vernon County, on left bank 10 ft upstream from bridge on State Highway 82, in La Farge, 0.3 mile upstream from Otter Creek, and 1.3 miles downstream from powerplant.

DRAINAGE AREA.--266 sq mi,

PERIOD OF RECORD.--Water temperatures: July 1971 to September 1972.
Sediment records: October 1971 to September 1972.

EXTREMES, 1971-72.--Specific conductance: Maximum daily, 600 micromhos March 7, 1972; minimum daily, 25 micromhos September 24, 1972.
Turbidity: Maximum daily, 390 Jackson Turbidity Units (JTU) September 24, 1972; minimum daily, 2 JTU on many days during water year.
Water temperatures: Maximum daily, 26.5°C July 22, August 18, 1972; minimum daily, freezing point on many days during winter period.
Sediment discharge: Maximum daily, 10,500 tons April 13, 1972; minimum daily, 0 tons December 25, 1971.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Continuous recorder

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	16.0	17.0	8.0	6.0	7.0	0.0	0.0	0.0	0.5	0.5	0.5
2	18.5	17.5	18.0	6.5	6.0	6.5	0.0	0.0	0.0	0.5	0.5	0.5
3	18.0	16.5	17.5	6.5	4.5	5.5	0.0	0.0	0.0	0.5	0.5	0.5
4	16.5	14.0	15.5	4.5	4.0	4.5	0.0	0.0	0.0	0.5	0.5	0.5
5	14.0	12.5	13.5	5.0	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
6	12.5	11.0	12.5	4.5	2.0	3.5	2.0	0.0	1.0	0.0	0.0	0.0
7	11.5	10.5	11.0	1.5	0.0	1.0	3.0	2.0	2.5	0.0	0.0	0.0
8	11.5	10.5	11.0	0.5	0.0	0.0	3.5	3.0	3.0	0.0	0.0	0.0
9	11.0	10.0	10.5	2.0	0.0	1.0	3.5	3.0	3.5	0.0	0.0	0.0
10	10.5	9.5	10.0	3.0	1.5	2.0	3.0	2.5	3.0	0.0	0.0	0.0
11	10.5	9.5	10.0	3.0	1.5	2.0	3.0	2.0	2.5	0.0	0.0	0.0
12	9.0	8.5	8.5	3.5	2.0	3.0	2.5	0.0	1.5	0.0	0.0	0.0
13	9.5	7.5	8.5	4.5	3.0	4.0	0.5	0.0	0.0	0.0	0.0	0.0
14	10.5	8.0	9.0	6.5	4.0	5.0	0.5	0.0	0.0	0.0	0.0	0.0
15	11.0	9.0	9.5	6.5	5.5	6.0	1.5	0.0	0.5	0.0	0.0	0.0
16	11.0	10.0	10.5	6.5	5.5	6.0	1.5	0.5	1.0	0.0	0.0	0.0
17	12.0	10.0	10.5	8.5	6.5	7.5	0.5	0.0	0.0	0.0	0.0	0.0
18	13.0	11.0	11.5	9.5	8.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0
19	15.0	12.5	13.5	8.0	5.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0
20	14.5	13.5	14.0	5.0	3.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
21	14.0	13.0	13.5	3.5	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
22	14.5	13.5	14.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
23	14.0	13.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	13.0	12.0	12.5	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
25	13.0	12.0	12.5	2.0	0.5	1.5	0.5	0.0	0.5	0.0	0.0	0.0
26	13.5	12.5	13.0	2.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
27	13.5	12.5	13.0	2.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
28	12.0	10.0	11.0	1.5	1.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0
29	10.0	9.5	9.5	1.0	0.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
30	12.0	10.0	11.0	0.5	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
31	10.5	8.5	10.0	---	---	---	0.5	0.5	0.5	0.0	0.0	0.0
MONTH	18.5	7.5	12.0	9.5	0.0	3.5	3.5	0.0	0.5	0.5	0.0	0.0

WISCONSIN RIVER BASIN

05408000 KICKAPOO RIVER AT LA FARGE, WIS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	0.0	0.0	0.0	4.5	3.0	4.0	13.0	11.0	12.0
2	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.0	4.0	12.0	11.0	11.5
3	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.0	3.5	13.0	10.5	12.0
4	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.0	3.0	14.0	12.0	13.0
5	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.0	4.5	13.5	12.0	12.5
6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	5.5	6.0	13.5	12.5	13.0
7	0.0	0.0	0.0	0.0	0.0	0.0	5.5	2.5	4.0	13.5	11.5	12.5
8	0.0	0.0	0.0	0.0	0.0	0.0	4.5	1.5	3.0	14.5	11.5	12.5
9	0.0	0.0	0.0	0.0	0.0	0.0	5.0	4.0	4.5	14.5	12.0	13.0
10	0.0	0.0	0.0	0.0	0.0	0.0	8.0	4.5	6.0	16.0	12.5	13.5
11	0.0	0.0	0.0	0.0	0.0	0.0	8.5	7.5	8.0	16.0	13.5	14.5
12	0.0	0.0	0.0	0.0	0.0	0.0	7.5	6.5	7.0	17.5	14.0	15.5
13	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.5	4.0	17.5	16.0	16.0
14	0.0	0.0	0.0	0.0	0.0	0.0	5.0	4.0	4.5	16.5	15.0	15.5
15	0.0	0.0	0.0	0.5	0.0	0.0	7.0	5.0	6.0	17.0	14.5	15.5
16	0.0	0.0	0.0	0.5	0.0	0.5	9.5	7.0	8.0	19.0	15.5	17.0
17	0.0	0.0	0.0	0.5	0.5	0.5	10.5	8.0	9.5	20.5	17.0	18.5
18	0.0	0.0	0.0	1.5	0.5	1.0	13.0	10.5	12.0	22.0	18.5	20.0
19	0.0	0.0	0.0	3.0	1.0	1.5	12.5	9.5	11.0	22.5	19.5	21.0
20	0.0	0.0	0.0	4.0	1.5	2.5	11.0	8.5	10.0	23.0	20.0	21.5
21	0.0	0.0	0.0	4.0	1.5	2.0	10.0	6.5	8.5	23.5	20.5	21.5
22	0.0	0.0	0.0	2.5	2.0	2.0	6.0	5.0	5.0	23.5	20.5	21.5
23	0.0	0.0	0.0	3.0	1.0	2.0	5.5	4.5	5.0	22.5	20.5	21.5
24	0.0	0.0	0.0	3.5	2.0	2.5	8.5	5.5	7.0	23.0	21.0	22.0
25	0.0	0.0	0.0	5.0	3.0	4.0	10.0	7.5	8.5	22.0	20.5	21.0
26	0.0	0.0	0.0	4.5	3.5	4.0	11.0	8.5	9.5	23.0	20.0	21.5
27	0.0	0.0	0.0	3.5	3.0	3.5	12.0	10.0	10.5	22.5	20.5	21.5
28	0.0	0.0	0.0	4.5	3.0	4.0	11.0	10.5	11.0	21.5	20.0	21.0
29	0.0	0.0	0.0	4.5	3.5	4.0	12.0	10.0	11.0	21.0	19.5	20.5
30	---	---	---	4.5	3.0	3.5	11.5	11.0	11.0	19.5	15.5	17.5
31	---	---	---	5.0	3.5	4.0	---	---	---	17.0	14.5	15.5
* MONTH	0.0	0.0	0.0	5.0	0.0	1.5	13.0	1.5	7.0	23.5	10.5	17.0

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	14.5	16.5	23.0	20.5	21.5	20.0	19.0	19.5	21.5	20.0	21.0
2	20.5	16.5	18.5	22.5	21.0	21.5	20.5	15.5	19.5	21.0	19.0	20.0
3	22.5	19.0	20.5	21.5	19.5	20.5	21.0	19.5	20.0	19.0	17.0	18.0
4	23.0	20.5	21.5	21.0	18.5	19.5	20.0	19.0	19.5	17.5	16.0	17.0
5	21.0	19.0	20.0	19.5	17.5	18.5	19.5	17.5	18.5	19.0	16.5	17.5
6	21.5	18.5	20.0	18.5	17.0	17.5	19.5	18.5	19.0	18.5	17.5	18.0
7	21.0	19.5	20.0	17.5	16.5	17.0	19.0	18.0	18.5	19.0	18.0	18.5
8	22.0	19.0	20.5	17.5	16.0	17.0	18.0	16.5	17.5	19.5	18.0	18.5
9	21.0	18.0	20.0	20.0	17.0	18.5	17.5	15.5	16.0	19.0	17.0	18.0
10	18.0	16.5	17.0	22.0	19.0	20.5	18.5	15.5	17.0	17.5	17.0	17.0
11	18.0	15.0	16.5	23.5	21.0	22.0	20.5	17.5	18.5	17.5	16.5	17.0
12	20.5	17.0	19.0	23.0	21.5	22.0	21.5	15.5	20.5	17.5	17.0	17.0
13	23.0	20.0	21.5	23.5	21.5	22.5	22.5	20.5	21.5	18.0	17.5	17.5
14	22.0	20.5	21.5	22.5	21.0	21.5	23.5	22.0	23.0	18.0	17.0	17.5
15	21.5	19.5	20.0	22.0	20.0	21.0	23.0	22.0	22.0	18.0	16.5	17.0
16	19.5	16.5	18.0	22.0	20.0	21.0	24.5	21.5	23.0	18.5	16.5	17.5
17	18.0	15.0	16.5	21.0	18.5	20.0	26.0	23.5	24.5	19.5	17.5	18.5
18	19.5	16.5	18.0	20.5	18.0	19.0	26.5	24.0	25.0	19.5	18.5	19.0
19	21.5	18.5	20.0	21.0	19.5	20.0	25.5	23.5	24.5	20.0	18.5	19.0
20	21.0	18.5	20.0	23.5	20.5	22.0	24.4	22.7	23.6	20.5	19.0	20.0
21	19.0	17.0	18.0	26.0	23.0	24.5	24.0	22.0	23.0	20.0	17.0	19.0
22	19.0	16.0	17.5	26.5	25.0	25.5	23.0	21.0	22.5	17.0	15.5	16.0
23	18.5	16.0	17.5	25.0	23.5	24.5	21.0	19.0	20.0	---	---	---
24	19.0	16.5	17.5	25.5	23.0	24.0	19.0	18.5	18.5	---	---	---
25	20.5	17.0	19.0	23.5	22.0	23.0	18.5	18.0	18.5	---	---	---
26	22.5	18.5	20.5	22.0	18.0	20.5	18.0	18.0	18.0	---	---	---
27	23.0	20.0	21.5	18.0	17.0	17.5	19.0	17.5	18.5	---	---	---
28	21.5	20.5	21.0	18.0	17.5	17.5	21.0	19.0	20.0	---	---	---
29	21.5	19.0	20.0	20.5	18.0	19.0	22.5	20.0	21.0	24.0	23.5	24.0
30	23.0	20.0	21.5	22.0	19.0	20.5	22.5	21.0	21.5	26.0	24.0	25.0
31	---	---	---	21.0	20.5	20.5	22.0	21.0	21.5	---	---	---
* MONTH	23.0	14.5	19.5	26.5	16.0	20.5	26.5	15.5	20.5	26.0	15.5	18.5

05408000 KICKAPOO RIVER AT LA FARGE, WIS.--Continued

Daily Conductivities (Micromhos/cm at 25°C) once daily measurement

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	405	---	---	460	450	380	420	430	---	430	350
2	---	395	355	465	460	490	395	400	440	410	420	345
3	---	355	410	470	440	530	395	410	---	410	435	300
4	---	380	440	485	410	540	395	420	---	425	425	260
5	---	---	420	---	430	490	340	410	380	410	430	290
6	410	420	---	530	430	540	360	---	420	410	435	290
7	420	405	430	475	---	600	260	410	350	410	365	310
8	420	---	440	455	---	490	300	420	360	425	400	340
9	400	430	445	440	440	490	370	---	430	---	400	320
10	415	420	445	430	440	470	390	---	420	410	425	325
11	405	420	440	435	450	440	310	420	---	430	---	250
12	360	450	---	435	440	370	---	420	430	---	430	230
13	405	440	455	440	450	365	200	---	420	400	420	200
14	400	455	460	---	450	280	320	---	390	400	430	260
15	380	445	425	---	420	295	350	340	310	400	430	300
16	350	435	300	510	450	220	370	420	400	400	430	340
17	360	---	390	500	460	215	380	420	420	390	430	330
18	370	440	---	480	460	175	380	410	---	360	410	350
19	410	455	---	380	460	175	400	420	420	350	405	---
20	395	450	480	---	---	155	400	380	420	390	295	310
21	400	450	460	410	470	130	420	400	420	410	195	300
22	405	455	460	440	470	155	360	410	420	410	320	340
23	405	455	450	440	470	280	360	400	430	350	380	---
24	420	450	455	460	460	340	400	410	320	390	380	25
25	430	450	455	---	450	355	400	400	370	390	430	250
26	430	450	455	---	470	365	---	430	360	---	420	160
27	410	440	455	470	480	370	400	430	370	350	395	150
28	420	440	480	---	450	380	410	440	360	350	410	325
29	415	440	500	---	440	390	420	420	360	390	435	260
30	405	440	475	460	---	380	420	420	425	---	350	305
31	405	---	460	470	---	395	---	420	---	430	---	---

Daily Turbidities (Jackson Turbidity Units) once daily measurement

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	10	---	---	5	4	4	10	4	---	10	7
2	---	10	6	5	6	3	6	20	7	8	10	10
3	---	30	7	6	8	5	15	15	5	6	6	7
4	---	15	5	4	3	6	30	15	---	2	6	10
5	---	---	6	---	2	4	7	15	6	8	7	8
6	7	6	---	10	2	7	30	---	20	7	10	9
7	20	5	6	5	---	7	100	5	15	3	50	6
8	8	---	6	4	3	6	40	4	20	7	20	3
9	7	4	4	6	3	6	20	---	7	---	15	6
10	7	3	6	7	2	5	35	6	15	3	10	9
11	6	3	10	6	3	4	50	9	---	5	---	10
12	6	4	---	6	2	10	---	4	6	---	6	8
13	5	4	7	15	2	20	130	---	15	3	15	150
14	5	4	5	---	5	45	75	---	15	20	15	40
15	4	5	15	---	2	35	30	5	45	20	7	20
16	7	7	40	4	3	30	50	8	20	10	2	3
17	5	---	15	5	3	40	45	5	20	20	5	10
18	4	10	---	6	3	55	40	5	---	30	10	3
19	25	10	---	5	3	55	35	4	20	25	15	---
20	9	8	5	---	---	40	30	5	15	15	50	35
21	10	8	6	5	3	45	20	6	15	15	55	20
22	8	5	10	3	3	65	120	8	8	20	45	7
23	8	5	6	5	3	25	35	7	3	25	35	9
24	8	4	4	5	3	20	30	7	15	40	25	390
25	6	3	4	---	3	3	20	4	9	20	20	150
26	8	4	3	---	4	10	---	4	10	---	20	170
27	25	5	4	5	3	8	15	3	9	60	15	160
28	10	4	4	---	3	10	10	3	15	35	15	55
29	4	4	4	---	3	3	25	3	15	15	15	150
30	6	5	5	5	---	20	7	4	4	---	20	55
31	9	---	4	5	---	20	---	4	---	10	---	---

05408000 KICKAPOO RIVER AT LA FARGE, WIS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER SEDIMENT DISCHARGE (TONS/DAY)	NOVEMBER MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER SEDIMENT DISCHARGE (TONS/DAY)	DECEMBER MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	156	28	12	--	--	--
2	--	--	--	293	44	35	135	20	7.3
3	--	--	--	258	48	33	145	14	5.5
4	--	--	--	139	22	8.3	132	6	2.1
5	--	--	--	--	--	--	131	8	2.8
6	105	24	6.8	130	8	2.8	132	8	2.9
7	100	119	32	119	7	2.2	142	6	2.3
8	106	35	10	--	--	--	142	10	3.8
9	96	20	5.2	119	4	1.3	--	--	--
10	102	59	16	119	4	1.3	168	16	7.3
11	110	17	5.0	119	6	1.9	207	18	10
12	97	20	5.2	118	6	1.9	--	--	--
13	97	25	6.5	117	10	3.2	118	13	4.1
14	101	14	3.8	126	8	2.7	138	18	6.7
15	99	13	3.5	101	14	3.8	--	--	--
16	100	55	15	130	17	6.0	361	103	100
17	--	--	--	--	--	--	156	10	4.2
18	88	17	4.0	148	39	16	--	--	--
19	--	--	--	154	22	9.1	--	--	--
20	151	42	17	142	12	4.6	165	1	.45
21	102	26	7.2	--	--	--	155	5	2.1
22	125	48	16	116	5	1.6	128	2	.69
23	116	24	7.5	118	4	1.3	131	2	.71
24	118	35	11	123	7	2.3	139	2	.75
25	106	20	5.7	128	9	3.1	131	0	0
26	139	24	9.0	125	13	4.4	136	4	1.5
27	100	69	19	170	14	6.4	136	1	.37
28	105	36	10	143	6	2.3	--	--	--
29	119	14	4.5	144	6	2.3	120	2	.65
30	95	19	4.9	134	10	3.6	120	3	.97
31	147	30	12	--	--	--	120	1	.32

05408000 KICKAPOO RIVER AT LA FARGE, WIS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	100	8	2.2	130	7	2.5
2	--	--	--	100	10	2.7	120	11	3.6
3	110	6	1.8	100	16	4.3	110	17	5.0
4	100	9	2.4	100	7	1.9	110	5	1.5
5	--	--	--	100	8	2.2	120	4	1.3
6	100	16	4.3	100	6	1.6	130	6	2.1
7	110	8	2.4	--	--	--	130	6	2.1
8	120	6	1.9	100	18	4.9	130	39	14
9	120	6	1.9	100	8	2.2	120	16	5.2
10	120	13	4.2	100	6	1.6	120	4	1.3
11	120	8	2.6	100	6	1.6	130	6	2.1
12	120	10	3.2	100	6	1.6	180	47	23
13	110	50	15	110	8	2.4	220	68	40
14	--	--	--	120	6	1.9	270	172	125
15	--	--	--	120	5	1.6	350	173	163
16	100	40	11	120	8	2.6	470	243	308
17	120	25	8.1	120	5	1.6	600	323	523
18	130	23	8.1	120	6	1.9	800	671	1450
19	--	--	--	120	4	1.3	1010	981	2680
20	--	--	--	--	--	--	1270	1300	4460
21	130	20	7.0	120	6	1.9	1700	874	4010
22	120	26	8.4	120	2	.65	--	--	--
23	120	33	11	120	7	2.3	288	105	82
24	110	26	7.7	120	9	2.9	226	61	37
25	--	--	--	130	6	2.1	202	54	29
26	--	--	--	130	4	1.4	195	43	23
27	--	--	--	--	--	--	176	28	13
28	--	--	--	140	8	3.0	166	33	15
29	--	--	--	140	12	4.5	167	21	9.5
30	100	13	3.5	--	--	--	164	73	32
31	100	14	3.8	--	--	--	145	44	17

05408000 KICKAPOO RIVER AT LA FARGE, WIS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	150	20	8.1	188	42	21	110	20	5.9
2	148	14	5.6	220	40	24	113	22	6.7
3	146	12	4.7	198	28	15	98	22	5.8
4	141	139	53	169	32	15	--	--	--
5	146	20	7.9	152	58	24	113	45	14
6	233	100	63	--	--	--	123	47	16
7	440	474	563	150	32	13	110	42	12
8	177	70	33	142	34	13	99	55	15
9	196	53	28	--	--	--	110	57	17
10	169	164	75	135	38	14	109	60	18
11	330	328	292	129	20	7.0	--	--	--
12	--	--	--	126	21	7.1	113	52	16
13	1430	2710	10500	--	--	--	131	68	24
14	360	420	408	--	--	--	178	66	32
15	280	137	104	156	21	8.8	173	128	60
16	293	156	123	140	34	13	120	70	23
17	271	141	103	129	25	8.7	116	61	19
18	225	187	114	125	58	20	--	--	--
19	220	121	72	117	20	6.3	106	68	19
20	189	102	52	116	20	6.3	99	60	16
21	235	81	51	114	20	6.2	103	42	12
22	501	636	860	113	37	11	108	42	12
23	315	58	49	111	18	5.4	91	43	11
24	230	66	41	108	22	6.4	89	40	9.6
25	198	68	36	104	20	5.6	93	38	9.5
26	--	--	--	105	12	3.4	98	38	10
27	167	44	20	104	12	3.4	97	25	6.5
28	157	50	21	103	9	2.5	89	32	7.7
29	159	58	25	116	9	2.8	123	46	15
30	153	26	11	131	18	6.4	98	38	10
31	--	--	--	129	16	5.6	--	--	--

05408000 KICKAPOO RIVER AT LA FARGE, WIS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	111	52	16	123	38	13
2	120	37	12	126	48	16	108	29	8.5
3	97	30	7.9	122	40	13	108	24	7.0
4	89	28	6.7	106	33	9.4	105	22	6.2
5	91	33	8.1	98	44	12	106	22	6.3
6	97	34	8.9	120	76	25	106	24	6.9
7	96	26	6.7	188	146	74	106	43	12
8	98	24	6.4	157	98	42	105	24	6.8
9	--	--	--	132	38	14	100	20	5.4
10	104	28	7.9	120	32	10	98	18	4.8
11	100	18	4.9	--	--	--	103	34	9.5
12	--	--	--	118	37	12	103	22	6.1
13	117	32	10	109	32	9.4	586	655	1040
14	104	21	5.9	109	104	31	255	173	119
15	102	52	14	116	28	8.8	157	58	25
16	102	42	12	109	28	8.2	139	33	12
17	137	78	29	106	25	7.2	132	78	28
18	215	82	48	98	25	6.6	129	30	10
19	126	78	27	142	38	15	--	--	--
20	114	35	11	228	86	53	218	130	77
21	116	38	12	412	723	804	167	42	19
22	142	48	18	170	104	48	150	30	12
23	173	56	26	157	107	45	131	18	6.4
24	157	92	39	131	55	19	129	54	19
25	114	46	14	126	60	20	567	1360	2080
26	--	--	--	262	55	39	1830	1220	6030
27	324	276	241	250	106	72	1590	524	2250
28	153	120	50	162	44	19	520	257	361
29	135	39	14	137	36	13	925	1260	3150
30	--	--	--	134	58	21	368	254	252
31	117	50	16	116	34	11	--	--	--

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
OCT.								
06...	1150	--	105	20	5.7	25	34	43
JAN.								
13...	1400	.0	110	35	10	14	18	26
APR.								
13...	1400	3.5	2080	2100	11800	49	64	75

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
OCT.							
06...	63	82	93	100	--	--	--
JAN.							
13...	34	50	66	78	92	95	100
APR.							
13...	85	92	96	98	100	--	--

05408000 KICKAPOO RIVER AT LA FARGE, WIS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
JAN.												
06...	0845	--	1	3	37	96	99	100	--	--	--	--
APR.												
06...	1100	--	4	5	14	68	93	97	99	100	--	--
SEP.												
06...	1130	17.0	4	12	34	71	76	77	77	77	79	88

05409870 NEDERLO CREEK NEAR GAYS MILLS, WIS.

LOCATION.--Lat 43°21'30", long 90°53'49", in NW 1/4 sec.7, T.10 N., R.4 W., Crawford County, on left bank just upstream from bridge on town road, 0.1 mile south of junction of two town roads, and 3.0 miles northwest of Gays Mills.

DRAINAGE AREA.--6.7 sq mi.

PERIOD OF RECORD.--Water temperatures: November 1967 to September 1972.

EXTREMES, 1967-72.--Water temperatures: Maximum, 26.5°C June 29, July 2, 1970; minimum, freezing point on many days during winter months.

REMARKS.--Equipment malfunction from November to February.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	19.0	14.0	---	---	---	---	---	---	---	---	5.5	0.0
2	16.5	13.5	---	---	---	---	---	---	---	---	1.5	0.0
3	16.0	10.5	---	---	---	---	---	---	---	---	4.0	0.0
4	14.5	8.5	---	---	---	---	---	---	---	---	4.0	0.0
5	15.0	8.5	---	---	---	---	---	---	---	---	2.0	0.0
6	12.0	8.0	---	---	---	---	---	---	---	---	5.5	0.0
7	13.0	5.5	---	---	---	---	---	---	---	---	6.0	0.0
8	13.5	9.0	---	---	---	---	---	---	---	---	4.0	0.0
9	10.5	8.0	---	---	---	---	---	---	---	---	5.5	0.0
10	13.0	5.5	---	---	---	---	---	---	---	---	7.0	0.0
11	12.0	6.0	---	---	---	---	---	---	---	---	11.0	3.0
12	9.5	5.0	---	---	---	---	---	---	---	---	6.0	3.0
13	11.0	6.0	---	---	---	---	---	---	---	---	8.0	1.0
14	13.0	5.5	---	---	---	---	---	---	---	---	9.5	0.5
15	13.0	6.0	---	---	---	---	---	---	---	---	5.0	1.5
16	12.0	9.5	---	---	---	---	---	---	---	---	4.0	1.5
17	14.5	7.0	---	---	---	---	---	---	---	---	8.5	1.5
18	15.5	10.0	---	---	---	---	---	---	---	---	10.0	1.0
19	16.0	13.0	---	---	---	---	---	---	---	---	10.0	4.0
20	13.0	10.5	---	---	---	---	---	---	---	---	10.5	5.5
21	14.5	11.0	---	---	---	---	---	---	---	---	8.0	6.5
22	14.0	11.5	---	---	---	---	---	---	---	---	8.0	3.5
23	13.5	11.0	---	---	---	---	---	---	---	---	10.0	1.5
24	12.0	11.0	---	---	---	---	---	---	---	---	9.5	1.5
25	14.5	11.0	---	---	---	---	---	---	---	---	12.0	4.0
26	14.5	10.5	---	---	---	---	---	---	---	---	7.0	4.0
27	13.5	9.0	---	---	---	---	---	---	---	---	7.0	3.5
28	10.0	5.5	---	---	---	---	---	---	---	---	9.5	4.5
29	11.0	7.0	---	---	---	---	---	---	---	---	7.0	4.5
30	15.5	10.5	---	---	---	---	---	---	---	---	10.0	2.0
31	10.5	5.0	---	---	---	---	---	---	---	---	10.0	2.0
MONTH	19.0	5.0	---	---	---	---	---	---	---	---	12.0	0.0

WISCONSIN RIVER BASIN

05409870 HEDERLO CREEK NEAR GAYS MILLS, WIS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	4.5	16.0	9.5	21.5	9.5	23.0	13.0	14.5	13.0	18.5	13.5
2	9.0	5.0	11.5	8.5	22.0	11.0	23.0	14.5	19.0	13.5	17.0	11.5
3	7.0	2.0	18.0	8.0	23.0	12.0	20.0	12.0	20.0	13.5	15.5	9.0
4	8.0	0.5	16.0	8.0	21.0	12.0	20.0	11.5	19.5	10.5	16.0	9.0
5	11.5	1.5	14.0	6.5	16.5	13.0	20.0	9.5	18.0	10.0	18.5	10.5
6	9.0	3.0	13.0	10.0	23.5	13.0	15.0	10.0	16.5	13.0	16.0	11.0
7	6.0	0.5	14.0	9.0	19.5	11.0	18.0	11.5	18.5	11.5	15.0	13.0
8	11.5	0.0	18.0	7.0	22.0	12.0	17.0	16.0	15.0	11.0	17.0	11.0
9	9.0	3.0	19.0	6.5	16.5	12.0	21.0	13.5	17.0	9.0	16.5	8.5
10	19.0	4.5	19.5	6.0	19.5	8.0	21.0	12.0	18.5	10.5	13.5	10.5
11	---	---	18.5	9.0	20.5	7.0	21.5	13.5	20.5	13.0	14.5	11.5
12	---	---	20.0	9.5	23.5	13.0	20.5	14.5	21.5	13.5	15.0	12.0
13	---	---	19.0	12.0	24.0	14.0	23.0	14.0	21.0	13.5	16.0	13.5
14	8.5	---	18.5	11.0	18.0	14.0	19.5	13.5	22.0	14.0	16.0	10.5
15	16.5	6.0	21.0	10.0	22.0	11.0	21.0	13.0	20.0	15.0	17.0	9.0
16	17.0	9.0	23.0	10.0	14.5	10.0	21.5	12.0	23.5	15.5	18.5	10.0
17	19.0	5.5	24.0	10.5	20.5	9.0	16.0	13.0	23.0	14.5	16.0	10.5
18	19.5	9.0	24.5	12.0	22.0	10.0	20.5	13.0	22.0	14.5	17.0	13.5
19	11.5	9.0	24.0	13.0	23.0	12.0	18.0	12.0	21.5	15.5	19.5	12.5
20	16.5	8.0	24.0	13.0	17.0	12.0	23.0	14.0	23.0	15.5	18.0	14.0
21	9.5	6.5	24.0	13.0	19.0	9.5	25.0	15.0	21.5	16.5	14.5	9.5
22	8.0	6.0	24.5	14.0	21.0	9.0	24.5	15.0	18.0	14.0	14.0	8.5
23	10.0	5.5	24.0	13.0	20.5	9.0	24.0	15.5	14.5	13.5	14.0	7.0
24	15.0	5.5	23.0	13.5	21.0	9.5	23.5	14.5	17.0	13.0	14.0	11.0
25	17.0	4.0	23.0	13.5	19.5	10.5	---	---	18.0	13.0	15.0	[illegible]
26	18.0	4.5	23.0	14.0	23.5	11.5	---	---	15.0	14.0	14.5	10.0
27	14.0	6.0	22.0	13.5	---	13.0	---	---	19.5	13.0	13.5	[illegible]
28	11.0	8.0	20.5	13.5	19.0	14.0	---	---	23.0	12.0	15.0	[illegible]
29	13.5	9.5	19.5	14.5	21.0	13.0	11.0	11.0	20.5	13.0	10.5	[illegible]
30	13.5	9.5	17.0	10.5	24.0	13.0	22.0	14.0	19.0	12.0	11.0	[illegible]
31	---	---	20.0	9.0	---	---	16.5	13.5	18.0	14.0	---	---
MONTH	19.5	0.0	24.5	6.0	24.0	7.0	25.0	9.5	23.5	9.0	[illegible]	[illegible]
YEAR	25.0	0.0										

05409870 NEDERLO CREEK NEAR GAYS MILLS, WIS.--Continued

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
05409870 - NEDERLO CR. NR. GAYS MILLS, WIS. (LAT 43 21 30 LONG 090 53 49)					
NOV., 1971					
01...	1115	--	2.3	2	.01
01...	1245	6.5	2.7	6	.04
01...	1500	7.0	3.8	28	.29
MAR., 1972					
14...	1030	--	5.2	42	.59
14...	1045	--	5.2	31	.44
14...	1115	--	5.5	67	.99
14...	1235	--	7.3	183	3.6
14...	1305	--	113	782	239
14...	1355	--	13	223	7.8
14...	1420	--	22	261	16
14...	1540	--	125	2580	871
14...	1635	--	146	2240	883
14...	1735	--	125	1360	459
14...	1800	--	120	927	300
14...	1805	--	115	902	280
14...	2230	--	28	184	14
14...	2300	--	25	127	8.6
15...	0000	--	20	149	8.0
15...	0030	--	18	132	6.4
15...	1000	--	16	119	5.1
15...	1130	--	14	92	3.5
15...	1330	--	5.7	72	1.1
15...	1345	--	7.6	158	3.2
15...	1347	--	7.9	246	5.2
15...	1350	--	16	177	7.6
15...	1515	--	239	2380	1540
15...	1525	--	239	2000	1290
15...	1530	--	230	1850	1150
15...	1545	--	226	1810	1100
16...	1500	--	74	418	84
17...	1120	--	5.2	147	2.1
17...	1145	--	7.6	136	2.8
17...	1215	--	8.9	140	3.4
17...	1245	--	25	275	19
17...	1315	--	129	1310	456
17...	1345	--	205	1850	1020
17...	1415	--	266	2330	1670
17...	1445	--	340	2350	2160
17...	1515	--	288	1690	1310
17...	1545	--	273	1420	1050
17...	1615	--	178	1090	524
17...	1645	--	141	790	301
17...	1715	--	109	701	206
17...	1745	--	89	611	147
17...	1815	--	69	412	77
17...	1845	--	54	327	48
17...	1915	--	40	261	28
17...	1945	--	31	212	18
17...	2015	--	26	170	12
17...	2045	--	20	173	9.3
17...	2115	--	18	139	6.8
17...	2145	--	14	107	4.0
17...	2215	--	12	78	2.5
17...	2245	--	10	54	1.5
17...	2315	--	8.9	50	1.2
17...	2345	--	8.0	39	.84
18...	0015	--	7.3	26	.51
18...	0045	--	6.7	22	.40
18...	0115	--	6.1	46	.76
18...	1330	--	7.0	35	.66
18...	1500	--	39	306	32
18...	1530	--	47	318	40
18...	1650	--	50	302	41
18...	1700	--	40	244	26
18...	1730	--	39	190	20
18...	1800	--	34	153	14
18...	1830	--	28	123	9.3
18...	1900	--	24	115	7.5
18...	1930	--	20	112	6.0
18...	2000	--	18	102	5.0
18...	2030	--	15	80	3.2
18...	2100	--	13	57	2.0
18...	2130	--	11	71	2.1
18...	2200	--	8.9	65	1.6
18...	2300	--	7.0	42	.79

05409870 NEDERLO CREEK NEAR GAYS MILLS, WIS.--Continued

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
05409870 - NEDERLO CR. NR. GAYS MILLS, WIS. (LAT 43 21 30 LONG 090 53 49)					
APR., 1972					
06...	1530	--	7.3	155	3.1
06...	1600	--	7.6	171	3.5
06...	1745	--	7.0	118	2.2
06...	1815	--	6.4	101	1.7
JULY.					
14...	1100	--	2.1	4	.02
AUG.					
11...	1445	--	6.4	159	2.7
11...	1515	--	25	542	37
11...	1545	--	17	1470	67
11...	1615	--	9.7	1050	27
20...	2025	--	6.1	1970	32
20...	2055	--	36	1410	137
20...	2125	--	45	1670	203
20...	2155	--	27	1630	119
20...	2225	--	21	1150	65
20...	2255	--	15	892	36
20...	2325	--	16	603	26
20...	2355	--	11	387	11
21...	0025	--	8.0	303	6.5
21...	0055	--	6.4	256	4.4
25...	1655	--	9.7	445	12
25...	1725	--	7.3	261	5.1
SEP.					
13...	0130	--	8.2	505	11
13...	0850	--	2.7	32	.23
25...	0640	--	6.1	79	1.3
25...	0710	--	8.9	85	2.0
25...	0740	--	8.2	94	2.1
25...	0810	--	6.7	56	1.0
26...	0100	--	6.4	139	2.4
26...	0130	--	13	15	.54
26...	0200	--	12	414	13
26...	0230	--	9.3	451	11
26...	0300	--	7.6	284	5.8
26...	0330	--	6.7	194	3.5
26...	0400	--	6.1	139	2.3
26...	0430	--	5.5	105	1.6
26...	0500	--	6.7	98	1.8
26...	0530	--	6.4	87	1.5
28...	1300	--	8.0	6510	141
28...	1330	--	8.6	512	12
28...	1400	--	60	1030	167
28...	1430	--	91	4520	1110
28...	1500	--	87	2320	545
28...	1530	--	54	1820	265
28...	1600	--	41	1210	134
28...	1630	--	65	829	145
28...	1730	--	27	938	68
28...	1800	--	19	614	31
28...	1830	--	15	480	19
28...	1900	--	12	427	14
28...	1930	--	10	306	8.3
28...	2000	--	9.3	280	7.0
28...	2030	--	8.0	242	5.2
28...	2100	--	7.3	221	4.4
28...	2130	--	6.7	196	3.5
28...	2200	--	6.1	160	2.6
28...	2230	--	5.7	135	2.1
28...	2300	--	5.5	124	1.8

05409870 NEDERLO CREEK NEAR GAYS MILLS, WIS.--Continued

05409870 - NEDERLO CR. NR. GAYS MILLS, WIS. (LAT 43 21 30 LONG 090 53 49)

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
MAR., 1972											
14...	1355	13	223	7.8	12	16	20	27	41	55	64
14...	1800	120	927	300	16	23	29	40	61	82	91
15...	1530	230	1850	1140	13	19	24	34	52	74	87

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAR.			
14...	81	98	100
14...	97	100	--
15...	93	98	100

05430500 ROCK RIVER AT AFTON, WIS.

LOCATION.--Lat 42°36'33", long 89°04'14", in NE 1/4 sec.28, T.2 N., R.12 E., Rock County, temperature recorder at gaging station on right bank in Afton, 0.3 mile downstream from highway bridge, and 1.1 miles upstream from Bass Creek.

DRAINAGE AREA.--3,300 sq mi, approximately.

PERIOD OF RECORD.--Water temperatures: September 1954 to September 1972.

EXTREMES, 1971-72.--Water temperatures: Maximum, 28.0°C Aug. 19; minimum, freezing point on many days during December to March.

EXTREMES, 1954-72.--Water temperatures: Maximum, 32.0°C July 27-30, Aug. 4, 1955; July 26, 28, 1964; minimum, freezing point on many days during winter months 1954-68, 1971-72.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	18.5	12.0	10.5	1.5	1.0	1.0	0.5	0.0	0.0	0.5	0.0
2	21.0	18.0	11.0	10.5	1.0	0.5	1.0	0.5	0.0	0.0	0.0	0.0
3	20.5	18.5	10.5	9.0	1.0	1.0	1.0	0.5	0.5	0.0	0.5	0.0
4	18.5	15.5	9.0	7.0	1.0	1.0	0.5	0.5	0.5	0.0	1.0	0.0
5	18.0	15.5	9.0	8.0	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0
6	16.5	14.5	9.0	5.5	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0
7	16.0	13.0	5.5	4.0	1.5	1.0	0.0	0.0	0.0	0.0	3.0	0.0
8	15.0	13.5	5.0	4.5	2.0	1.5	0.0	0.0	0.0	0.0	0.5	0.0
9	14.0	12.0	4.5	4.5	3.0	2.0	0.5	0.0	0.0	0.0	1.5	0.0
10	14.5	11.5	5.5	4.0	3.5	3.0	0.5	0.0	0.0	0.0	1.0	0.0
11	14.0	11.5	5.5	4.5	3.5	3.0	0.5	0.0	0.0	0.0	2.0	0.0
12	13.5	10.5	5.5	5.0	3.5	3.0	0.5	0.0	0.0	0.0	1.0	0.0
13	14.5	12.0	6.0	5.5	3.0	2.0	0.5	0.0	0.0	0.0	0.5	0.5
14	14.5	11.5	8.5	5.5	2.0	1.5	0.5	0.5	0.0	0.0	2.0	0.5
15	15.0	11.5	8.5	6.0	1.5	1.5	0.5	0.5	0.5	0.0	1.5	1.0
16	15.0	12.0	9.0	8.0	1.5	1.5	0.5	0.5	0.0	0.0	1.5	1.0
17	16.0	13.0	10.0	9.0	1.5	0.5	0.5	0.0	0.5	0.0	2.0	1.0
18	16.5	14.0	10.0	10.0	0.5	0.5	0.0	0.0	0.5	0.0	2.0	1.5
19	16.5	15.5	10.0	8.5	0.5	0.0	0.0	0.0	0.0	0.0	2.0	2.0
20	17.0	15.5	8.5	8.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	2.0
21	17.0	15.5	8.0	5.5	0.0	0.0	0.0	0.0	0.5	0.0	3.5	3.0
22	17.0	16.0	5.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	2.0
23	17.0	15.0	4.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.5
24	15.0	15.0	4.0	3.5	0.0	0.0	0.0	0.0	1.0	0.0	1.5	1.0
25	15.5	15.0	3.5	3.0	0.5	0.0	0.0	0.0	0.5	0.0	3.0	1.5
26	16.5	14.0	3.0	2.0	0.5	0.5	0.0	0.0	1.0	0.0	2.0	2.0
27	16.0	14.5	3.0	2.0	0.5	0.5	0.0	0.0	0.5	0.0	2.0	1.5
28	14.5	12.0	3.0	2.0	0.5	0.0	0.0	0.0	2.0	0.0	3.0	2.0
29	14.5	13.0	2.0	1.5	0.0	0.0	0.0	0.0	1.0	0.5	3.0	2.0
30	15.5	14.0	2.0	1.0	0.0	0.0	0.0	0.0	---	---	2.0	1.5
31	15.5	11.5	---	---	0.5	0.0	0.0	0.0	---	---	3.5	2.0
MONTH	21.0	10.5	12.0	1.0	3.5	0.0	1.0	0.0	2.0	0.0	3.5	0.0

05430500 ROCK RIVER AT AFTON, WIS.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.5	3.0	11.5	11.0	20.0	17.0	24.0	20.5	23.0	22.0	24.5	23.0
2	3.0	3.0	11.5	11.5	21.0	18.5	23.0	21.0	22.0	20.5	23.0	21.5
3	3.0	3.0	11.5	11.5	24.5	19.0	23.5	20.0	22.0	20.5	21.5	20.0
4	3.0	2.0	11.5	11.0	24.0	20.0	22.0	19.5	23.0	19.5	20.0	17.0
5	3.5	2.0	13.5	11.5	21.5	19.5	23.0	19.0	22.0	20.0	20.0	18.5
6	4.0	3.0	13.5	13.0	23.5	20.5	22.0	20.5	23.0	21.0	19.5	19.0
7	3.5	2.0	13.0	11.5	23.5	20.0	22.0	20.0	22.0	20.5	19.5	19.0
8	2.0	1.5	11.5	10.0	24.0	20.0	23.5	19.0	20.5	19.0	19.0	19.0
9	3.5	1.5	10.0	10.0	24.0	20.5	23.0	20.5	21.0	16.5	19.0	18.0
10	4.5	3.5	11.5	10.0	21.5	19.5	25.0	20.0	21.0	18.0	18.5	17.0
11	4.5	4.5	13.5	11.5	20.5	18.5	26.5	22.0	20.5	18.0	18.0	17.0
12	4.5	4.5	14.5	13.0	21.0	18.5	25.5	23.0	21.0	19.0	17.0	17.0
13	5.5	4.5	14.5	13.5	23.5	19.5	25.0	23.0	24.0	20.0	18.0	17.0
14	5.5	5.5	14.5	14.0	23.5	21.0	25.0	23.0	24.5	21.5	19.0	18.0
15	5.5	4.0	15.5	14.5	24.0	20.5	25.5	23.0	24.0	22.0	20.0	18.5
16	4.0	3.5	16.5	15.5	23.5	20.5	26.0	23.0	24.0	22.0	19.5	18.0
17	3.5	2.0	19.0	16.5	23.0	19.5	25.0	23.5	25.5	23.0	20.5	19.0
18	8.5	3.5	19.5	18.5	23.0	19.5	24.0	23.5	27.0	24.5	20.5	19.5
19	8.5	8.5	20.5	19.5	23.5	19.5	24.0	23.5	28.0	25.5	20.5	19.5
20	9.0	8.5	22.0	20.5	23.5	21.0	26.0	23.5	27.0	25.5	20.5	19.5
21	9.0	8.5	23.0	21.5	23.0	20.0	28.0	25.0	26.5	25.0	20.5	19.5
22	8.5	6.5	24.0	23.0	22.0	20.0	29.0	26.5	26.5	25.5	19.5	19.0
23	6.5	6.5	24.0	23.0	21.5	19.0	29.0	26.5	26.0	24.5	19.0	18.0
24	6.5	6.5	23.5	21.5	21.0	19.0	28.5	26.5	24.5	23.5	18.0	18.0
25	8.0	6.5	23.5	21.5	21.5	19.5	28.0	25.5	24.0	22.0	18.5	18.0
26	9.0	8.0	24.0	23.0	23.0	19.5	26.0	22.0	22.0	21.5	18.5	18.5
27	10.0	9.0	24.0	23.5	24.0	20.5	23.5	22.0	21.5	21.0	18.5	17.0
28	10.0	10.0	24.0	23.0	23.5	21.0	23.0	21.0	24.5	21.0	17.0	16.5
29	10.0	10.0	23.5	22.0	23.0	20.0	24.0	21.0	24.5	22.0	16.5	16.0
30	11.0	10.0	23.0	19.5	26.0	20.0	24.5	21.0	25.5	24.0	16.0	14.5
31	---	---	19.5	18.0	---	---	24.0	22.0	25.5	24.5	---	---
MONTH	11.0	1.5	24.0	10.0	26.0	17.0	29.0	19.0	28.0	16.5	24.5	14.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)
STREAMS TRIBUTARY TO LAKE MICHIGAN									
04085161 - MINK RIVER NR. ELLISON BAY, WIS. (LAT 45 14 29 LONG 087 02 45)									
JUNE, 1972 07...	22.0	--	7.8	60	0	64	32	2.4	1.1
04085163 - HEINS CREEK NR. BAILEYS HARBOR, WIS. (LAT 45 04 09 LONG 087 10 07)									
JUNE, 1972 06...	16.0	E3.0	10	40	13	60	33	1.6	1.4
04085171 - LOGAN CREEK NR. JACKSONPORT, WIS. (LAT 44 57 27 LONG 087 13 04)									
JUNE, 1972 06...	8.5	E3.0	9.9	30	2	56	31	1.9	1.6
04085175 - LILLY BAY CR. NR. STURGEON BAY, WIS. (LAT 44 50 54 LONG 087 16 03)									
JUNE, 1972 07...	11.5	E4.0	7.8	50	0	63	34	2.5	1.5
04085178 - BEAR CR. NR. STURGEON BAY, WIS. (LAT 44 42 14 LONG 087 21 15)									
JUNE, 1972 07...	13.0	E4.0	15	80	19	41	35	3.6	1.4
WISCONSIN RIVER BASIN									
05390130 - TAMARACK C. NR. CONOVER, WIS. (LAT 46 05 25 LONG 089 18 40)									
OCT., 1971 11...	9.5	10	11	440	20	11	1.8	1.5	.5
05390410 - DEERSKIN RIVER NR. PHELPS, WIS. (LAT 46 02 35 LONG 089 03 13)									
OCT., 1971 12...	10.0	43	2.1	160	20	11	2.9	1.7	.6
05390519 - RICE CREEK NR. EAGLE RIVER, WIS. (LAT 45 55 28 LONG 089 19 27)									
OCT., 1971 11...	9.5	37	3.6	550	10	9.1	2.2	1.4	.8

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	HARD-NESS (CA,MG) (MG/L)
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued									
04085161 - MINK RIVER AT ELLISON BAY, WIS. (LAT 45 14 29 LONG 087 02 45)									
JUNE, 1972 07...	328	0	12	5.0	.3	--	292	264	290
04085162 - [illegible] CREEK [illegible] WIS. (LAT 45 06 56 LONG 087 10 07)									
JUNE, 1972 06...	326	0	12	4.3	.2	--	242	265	280
04085171 - LOGAN CREEK AT JACKSONPORT, WIS. (LAT 44 57 27 LONG 087 13 04)									
JUNE, 1972 06...	244	0	16	5.1	.2	--	258	271	260
04085175 - LILY BAY CR. AT STURGEON BAY, WIS. (LAT 44 50 54 LONG 087 19 03)									
JUNE, 1972 07...	326	0	16	12	.2	--	316	302	300
04085178 - [illegible] CR. AT STURGEON BAY, WIS. (LAT 44 47 14 LONG 087 21 15)									
JUNE, 1972 07...	262	0	45	5.5	.2	--	296	254	250
WISCONSIN RIVER BASIN--Continued									
05394130 - TAMARACK C. [illegible] WIS. (LAT 46 [illegible])									
OCT., 1971 11...	43	0	5.2	1.5	.0	--	56	54	36
05394610 - [illegible] RIVER [illegible] WIS. (LAT 46 02 46 LONG 089 03 13)									
OCT., 1971 12...	65	0	5.6	1.7	.0	--	60	67	60
05394614 - RICE CREEK [illegible] EAGLE RIVER, WIS. (LAT 45 56 24 LONG 089 14 27)									
OCT., 1971 11...	36	0	4.0	1.0	.0	--	46	34	30

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	DISSOLVED NITRATE (N) (MG/L)	COLOR (PLATINUM-COBALT UNITS)	SODIUM ADSORPTION RATIO	PERCENT SODIUM	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CACO3 (MG/L)
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued									
04085161 - MINK RIVER NR. ELLISON BAY, WIS. (LAT 45 14 29 LONG 087 02 45)									
JUNE, 1972 07...	20	510	7.8	.30	40	.1	2	--	264
04085153 - HEINS CREEK NR. BAILEYS HARBOR, WIS. (LAT 45 04 09 LONG 087 10 07)									
JUNE, 1972 06...	18	520	7.8	.40	17	.0	1	--	267
04085171 - LOGAN CREEK NR. JACKSONPORT, WIS. (LAT 44 57 27 LONG 087 13 04)									
JUNE, 1972 06...	24	500	8.1	1.1	8	.1	2	--	241
04085175 - LILLY BAY CR. NR. STURGEON BAY, WIS. (LAT 44 50 59 LONG 087 16 03)									
JUNE, 1972 07...	30	515	8.0	1.0	15	.1	2	--	267
04085178 - BEAR CR. NR. STURGEON BAY, WIS. (LAT 44 42 14 LONG 087 21 15)									
JUNE, 1972 07...	42	436	8.2	.70	10	.1	3	--	207
WISCONSIN RIVER BASIN--Continued									
05390130 - TAMARACK C. NR. CONOVER, WIS. (LAT 46 05 25 LONG 089 18 40)									
OCT., 1971 11...	0	71	6.9	.10	50	.1	8	--	35
05390418 - DEERSKIN RIVER NR. PHELPS, WIS. (LAT 46 02 35 LONG 089 03 13)									
OCT., 1971 12...	2	81	7.0	.10	10	.1	8	--	37
05390419 - RICE CREEK NR. EAGLE RIVER, WIS. (LAT 45 56 28 LONG 089 19 27)									
OCT., 1971 11...	2	62	6.6	.20	60	.1	9	--	28

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)
WISCONSIN RIVER BASIN--Continued									
05391088 - PINE LAKE CREEK NR. RHINELANDER, WISCONSIN (LAT 45 41 44 LONG 089 23 04)									
OCT.. 1971 11...	11.0	50	10	1500	30	5.4	1.8	1.4	.5
05391900 - NOISY CREEK NR. RHINELANDER, WISCONSIN (LAT 45 33 21 LONG 089 26 54)									
OCT.. 1971 13...	9.0	44	13	1100	65	11	2.7	1.5	.6
05392150 - MISHONAGON CREEK NR. WOODRUFF, WISCONSIN (LAT 45 54 41 LONG 089 45 30)									
OCT.. 1971 11...	9.5	23	14	530	20	14	1.8	.6	.6
05392295 - WILLOW RIVER NR. TRIPOLI, WIS. (LAT 45 41 59 LONG 089 58 59)									
OCT.. 1971 12...	10.5	127	6.5	1400	20	9.4	1.6	1.2	6.0
05392405 - RICE CREEK NR. HARSHAW, WIS. (LAT 45 36 36 LONG 089 36 21)									
OCT.. 1971 14...	12.5	16	13	760	0	9.8	2.7	2.0	.6
05392450 - LITTLE RICE RIVER NR. BRADLEY, WIS. (LAT 45 35 43 LONG 089 44 28)									
OCT.. 1971 13...	7.5	28	4.1	0	30	5.4	2.0	1.1	.5
05393520 - SQUAW CREEK NR. SPIRIT, WISCONSIN (LAT 45 27 23 LONG 089 58 27)									
OCT.. 1971 12...	4.5	7.0	13	700	14	10	3.4	2.0	.5
05393910 - NEW WOOD R. NR. IRMA, WIS. (LAT 45 18 28 LONG 089 53 21)									
OCT.. 1971 11...	10.0	20	9.4	520	0	11	3.6	2.1	.6
05394130 - SOUTH FORK COPPER RIVER NR HAMBURG, WISCONSIN (LAT 45 11 07 LONG 089 53 06)									
OCT.. 1971 11...	9.0	6.4	13	880	18	10	4.1	2.8	2.1
05394250 - PRAIRIE RIVER NR. PARRISH, WISCONSIN (LAT 45 25 05 LONG 089 24 10)									
OCT.. 1971 12...	8.5	32	14	710	51	14	4.3	1.8	.5
05394750 - MEADOW CREEK NR. MERRILL, WISCONSIN (LAT 45 14 09 LONG 089 40 03)									
OCT.. 1971 11...	7.0	5.3	22	380	68	32	8.5	3.1	1.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	HARD-NESS (CA,MG) (MG/L)
WISCONSIN RIVER BASIN--Continued									
05391088 - PINE LAKE CREEK NR. RHINELANDER, WISCONSIN (LAT 45 41 44 LONG 089 23 04)									
OCT., 1971 11...	17	0	5.0	2.9	.1	--	68	37	21
05391900 - NOISY CREEK NR. RHINELANDER, WISCONSIN (LAT 45 33 21 LONG 089 26 54)									
OCT., 1971 13...	38	0	4.8	2.9	.2	--	104	57	38
05392150 - MISHONAGON CREEK NR. WOODRUFF, WISCONSIN (LAT 45 54 41 LONG 089 45 30)									
OCT., 1971 11...	50	0	3.4	1.2	.2	--	70	61	42
05392295 - WILLOW RIVER NR. TRIPOLI, WIS. (LAT 45 41 59 LONG 089 58 59)									
OCT., 1971 12...	25	0	4.8	3.0	.2	--	98	42	30
05392406 - RICE CREEK NR. HARSHAW, WIS. (LAT 45 35 36 LONG 089 36 21)									
OCT., 1971 14...	40	0	5.2	1.5	.0	--	77	57	36
05392450 - LITTLE RICE RIVER NR. HEADLEY, WIS. (LAT 45 35 43 LONG 089 49 28)									
OCT., 1971 13...	17	0	4.6	2.0	.2	--	101	35	22
05393520 - SQUAW CREEK NR. SPIRIT, WISCONSIN (LAT 45 27 23 LONG 089 56 27)									
OCT., 1971 12...	40	0	5.8	2.0	.2	--	97	58	39
05393910 - NEW WOOD R. NR. IRMA, WIS. (LAT 45 18 28 LONG 089 53 21)									
OCT., 1971 11...	44	0	7.6	2.0	.2	--	105	60	48
05394130 - SOUTH FORK COPPER RIVER NR HAMBURG, WISCONSIN (LAT 45 11 07 LONG 089 53 06)									
OCT., 1971 11...	46	0	5.2	4.0	.4	--	103	66	42
05394250 - PRAIRIE RIVER NR. PARRISH, WISCONSIN (LAT 45 25 05 LONG 089 24 10)									
OCT., 1971 12...	57	0	6.8	1.8	.2	--	93	72	52
05394750 - MEADOW CREEK NR. MERRILL, WISCONSIN (LAT 45 14 09 LONG 089 40 03)									
OCT., 1971 11...	142	0	4.8	2.0	.2	--	142	144	120

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED NITRATE (N) (MG/L)	COLOR (PLAT-INUM-COBALT UNITS)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	CARBON DIOXIDE (CO2) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
WISCONSIN RIVER BASIN--Continued									
05391088 - PINE LAKE CREEK NR. RHINELANDER, WISCONSIN (LAT 45 41 44 LONG 089 23 04)									
OCT., 1971 11...	7	46	6.3	.00	140	.1	12	--	14
05391900 - NOISY CREEK NR. RHINELANDER, WISCONSIN (LAT 45 34 21 LONG 089 25 56)									
OCT., 1971 13...	8	72	6.7	.00	140	.1	[illegible]	--	31
05392150 - [illegible] CREEK NR. [illegible], WISCONSIN (LAT 45 54 [illegible] LONG 089 45 30)									
OCT., 1971 11...	2	88	7.1	.10	50	.0	4	--	41
05392295 - WILLOW RIVER NR. [illegible], WIS. (LAT 45 41 [illegible] LONG 089 58 54)									
OCT., 1971 12...	10	62	6.4	.40	260	.1	[illegible]	--	21
05392605 - RICE CREEK NR. [illegible], WIS. (LAT 45 [illegible] 40 LONG 089 35 21)									
OCT., 1971 14...	2	75	6.8	.33	90	.1	11	--	33
05392650 - LITTLE RICE RIVER NR. [illegible], WIS. (LAT 45 35 44 LONG 089 46 28)									
OCT., 1971 13...	8	61	7.1	.41	110	.1	10	--	14
05393520 - [illegible] CREEK NR. SPIRIT, WISCONSIN (LAT 45 27 24 LONG 089 56 27)									
OCT., 1971 12...	6	76	7.8	.10	130	.1	11	--	33
05393910 - NEW WOOD R. NR. IRMA, WIS. (LAT 45 16 24 LONG 089 53 21)									
OCT., 1971 11...	6	66	7.0	.20	160	.1	10	--	30
05394130 - SOUTH FORK COPPER RIVER NR. [illegible], WISCONSIN (LAT 45 11 07 LONG 089 53 06)									
OCT., 1971 11...	4	62	7.8	.10	130	.2	12	--	38
05394250 - PRAIRIE RIVER NR. [illegible], WISCONSIN (LAT 45 26 05 LONG 089 24 10)									
OCT., 1971 12...	6	100	6.9	.00	120	.1	7	--	47
05394750 - MEADOW CREEK NR. MERRILL, WISCONSIN (LAT 45 14 09 LONG 089 40 03)									
OCT., 1971 11...	0	255	7.6	.10	25	.1	5	--	116

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

The following table contains a series of periodic specific conductance measurements obtained as part of water-resources investigations at stream gaging stations in Wisconsin. The purpose of these measurements is to determine the range in specific conductance under various streamflow conditions.

Specific Conductance (Micromhos/cm at 25°C), October 1971 to September 1972

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
STREAMS TRIBUTARY TO LAKE SUPERIOR									
04025500 BOIS BRULE RIVER AT BRULE, WIS (LAT 46 32 16 LONG 091 35 43)									
Oct. 4, 1971	1300	12.0	208	110	Apr. 19, 1972	1500	5.5	423	100
Nov. 9, 1971	1200	3.5	247	110	May 26, 1972	1330	16.5	172	125
Dec. 2, 1971	1200	1.0	208	100	July 6, 1972	0830	14.5	170	120
Jan. 4, 1972	1630	0.0	152	110	Aug. 15, 1972	1000	14.5	169	150
Feb. 7, 1972	1400	0.0	145	110	Sept.21, 1972	1130	11.0	-	130
Mar. 15, 1972	1330	2.0	154	140					
04027000 BAD RIVER NEAR ODANAH, WIS (LAT 46 29 15 LONG 090 41 45)									
Oct. 5, 1971	1130	12.5	631	100	June 7, 1972	1230	20.5	219	140
Jan. 5, 1972	1730	0.0	185	70	July 11, 1972	1530	20.0	186	110
Feb. 8, 1972	1200	0.0	172	80	Aug. 17, 1972	1530	19.0	6,820	90
Mar. 14, 1972	1100	0.0	196	110	Sept.20, 1972	1300	15.5	217	120
Apr. 19, 1972	1200	1.0	3,680	100					
04027500 WHITE RIVER NEAR ASHLAND, WIS (LAT 46 29 50 LONG 090 54 15)									
Oct. 5, 1971	1400	12.5	331	160	Apr. 18, 1972	1330	1.0	1,560	75
Nov. 9, 1971	1400	0.5	149	160	May 29, 1972	1600	15.5	213	220
Jan. 5, 1972	1430	0.0	140	70	July 12, 1972	1000	21.0	174	140
Feb. 7, 1972	1730	0.0	159	110	Aug. 15, 1972	1700	18.5	231	210
Mar. 15, 1972	0930	0.5	151	150					
STREAMS TRIBUTARY TO LAKE MICHIGAN									
04064500 PINE RIVER BELOW PINE RIVER POWERPLANT NEAR FLORENCE, WIS (LAT 45 50 16 LONG 088 13 31)									
Oct. 8, 1971	0945	10.0	1,310	140	Apr. 11, 1972	0945	0.5	318	160
Nov. 4, 1971	1230	4.0	620	180	May 11, 1972	0945	11.0	1,320	110
Dec. 7, 1971	1445	5.0	334	90	June 14, 1972	1445	18.0	343	200
Jan. 11, 1972	1515	0.0	360	-	July 11, 1972	1030	17.0	301	240
Feb. 10, 1972	1600	0.0	230	180	Aug. 16, 1972	1130	21.0	592	160
Mar. 9, 1972	1530	0.0	204	140	Sept. 8, 1972	1115	16.5	455	320
04066000 MENOMINEE RIVER NEAR PEMBINE, WIS (LAT 45 35 24 LONG 087 46 34)									
Dec. 7, 1971	1145	1.0	2,470	120	Aug. 15, 1972	1430	20.5	2,360	200
June 14, 1972	1345	6.5	2,550	200	Sept.13, 1972	1600	14.5	2,240	210
July 10, 1972	1730	21.5	1,470	230					
04069500 PESHTIGO RIVER AT PESHTIGO, WIS (LAT 45 02 49 LONG 087 44 40)									
Oct. 1, 1971	1130	13.5	866	200	May 24, 1972	1215	21.5	914	230
Nov. 16, 1971	1150	3.5	812	220	June 27, 1972	1000	21.0	396	-
Jan. 21, 1972	1145	0.5	374	280	July 19, 1972	1215	20.0	822	300
Feb. 24, 1972	1200	0.5	520	180	Sept. 8, 1972	0900	21.0	837	200
Apr. 16, 1972	1615	1.5	4,620	280					
04071000 OCONTO RIVER NEAR GILLETT, WIS (LAT 44 51 53 LONG 088 18 00)									
Oct. 27, 1971	1100	13.5	504	275	Apr. 19, 1972	1800	3.5	3,060	-
Dec. 28, 1971	1530	0.0	336	220	May 24, 1972	1600	22.0	614	240
Jan. 27, 1972	1330	0.0	300	250	July 27, 1972	1330	20.0	406	240
Feb. 25, 1972	1100	0.0	360	300	Aug. 29, 1972	1130	18.5	958	250
Mar. 30, 1972	1200	0.0	745	260	Sept.27, 1972	1300	13.0	805	80

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued									
04072750 LAWRENCE CREEK NEAR WESTFIELD, WIS (LAT 43 53 52 LONG 089 34 43)									
Oct. 6, 1971	1100	10.0	16.5	300	Mar. 21, 1972	1400	9.0	21.2	300
Nov. 19, 1971	1030	6.0	16.5	300	Apr. 12, 1972	1145	8.0	17.9	300
Jan. 6, 1972	1200	3.0	15.6	-	May 23, 1972	1300	12.0	16.2	310
Feb. 23, 1972	1230	4.0	16.4	320	July 11, 1972	1700	18.5	15.0	305
Mar. 9, 1972	1530	8.5	16.0	-	Aug. 23, 1972	1700	13.5	15.1	280
Mar. 20, 1972	1615	-	30.7	-					
04073050 GRAND RIVER NEAR KINGSTON, WIS (LAT 43 41 09 LONG 089 05 09)									
Nov. 11, 1971	1400	5.0	16.1	800	May 5, 1972	1300	15.0	30.0	620
Dec. 17, 1971	1115	0.0	48.7	440	June 6, 1972	1130	20.0	22.6	-
Jan. 24, 1972	1215	0.0	10.8	840	July 14, 1972	1115	20.5	19.5	650
Mar. 9, 1972	1300	0.0	13.6	-	Sept. 1, 1972	1200	19.5	31.6	745
Mar. 22, 1972	1515	0.0	492	265	Sept.18, 1972	1300	-	350	-
Mar. 23, 1972	1400	-	353	-	Sept.19, 1972	1400	18.5	164	480
Mar. 30, 1972	1030	-	35.7	-					
04073500 FOX RIVER AT BERLIN, WIS (LAT 43 57 14 LONG 088 57 08)									
Nov. 4, 1971	1200	15.0	918	380	Apr. 13, 1972	1215	5.5	2,260	300
Dec. 7, 1971	1230	1.0	883	420	June 6, 1972	1600	24.0	599	330
Feb. 3, 1972	1515	0.0	566	-	July 27, 1972	1515	20.0	616	360
Mar. 9, 1972	1115	0.0	538	-	Sept.27, 1972	1515	13.5	2,090	360
04074950 WOLF RIVER AT LANGLADE, WIS (LAT 45 11 24 LONG 088 44 00)									
Oct. 21, 1971	1400	11.0	631	200	Apr. 28, 1972	1300	10.0	1,690	100
Nov. 15, 1971	1200	5.5	393	180	May 24, 1972	1130	20.0	545	200
Dec. 6, 1971	1330	0.5	377	280	June 27, 1972	1200	21.0	236	260
Feb. 3, 1972	1100	0.0	318	230	July 21, 1972	1200	21.5	308	220
Mar. 8, 1972	1300	0.0	298	250	Aug. 24, 1972	1230	12.0	1,030	140
Apr. 10, 1972	1200	1.5	403	205					
04075200 EVERGREEN CREEK NEAR LANGLADE, WIS (LAT 45 10 11 LONG 088 46 12)									
Oct. 21, 1971	1230	10.5	12.2	300	Apr. 10, 1972	1100	1.0	10.1	360
Nov. 15, 1971	1300	6.0	11.2	320	May 9, 1972	1130	8.5	13.0	300
Dec. 6, 1971	1200	4.5	11.6	150	June 27, 1972	1400	16.5	12.9	310
Jan. 21, 1972	1430	0.5	10.3	300	July 21, 1972	1030	15.0	12.3	320
Feb. 11, 1972	1200	0.0	8.73	370	Aug. 23, 1972	1200	12.0	13.6	300
Mar. 8, 1972	1130	0.0	10.1	320					
04077000 WOLF RIVER AT KESHENA FALLS, WIS (LAT 44 53 28 LONG 088 39 18)									
Oct. 1, 1971	1500	16.5	907	250	Apr. 21, 1972	1430	4.0	2,580	180
Nov. 16, 1971	1500	4.0	654	250	May 24, 1972	1400	22.0	840	170
Jan. 7, 1972	1400	0.0	645	260	June 29, 1972	1200	21.0	489	280
Feb. 29, 1972	1200	0.0	471	280	July 27, 1972	1100	18.5	587	250
04078500 EMBARRASS RIVER NEAR EMBARRASS, WIS (LAT 44 43 29 LONG 088 44 10)									
Oct. 1, 1971	1200	17.0	502	440	Apr. 21, 1972	1200	4.5	2,690	120
Nov. 16, 1971	1000	3.5	235	360	May 30, 1972	1500	19.5	218	380
Dec. 20, 1971	1330	0.0	368	280	June 26, 1972	1330	21.0	136	410
Feb. 11, 1972	1500	0.0	126	-	Aug. 4, 1972	1230	20.0	170	420
Apr. 6, 1972	1100	1.0	275	370					
04079000 WOLF RIVER AT NEW LONDON, WIS (LAT 44 23 32 LONG 088 44 25)									
Nov. 16, 1971	1200	3.5	1,570	400	May 30, 1972	1300	19.5	1,330	415
Jan. 7, 1972	1100	0.0	1,270	400	June 26, 1972	1600	23.5	1,010	400
Feb. 11, 1972	1200	0.0	1,070	-	Aug. 4, 1972	1400	21.0	1,050	400
Mar. 7, 1972	1400	0.0	818	-	Sept.11, 1972	1400	20.0	2,310	350
Apr. 21, 1972	1130	5.0	7,690	-					

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance	Date	Time	Water tem- per- ature (°C)	Dis- charge (cfs)	Specific conduct- ance
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued									
04080950 EMMONS CREEK NEAR RURAL, WIS (LAT 44 18 55 LONG 089 11 34)									
Oct. 19, 1971	1330	12.0	27.5	370	May 16, 1972	1115	11.0	27.5	270
Nov. 16, 1971	1345	7.0	27.3	480	June 13, 1972	1130	13.0	24.4	360
Dec. 14, 1971	1400	3.5	27.1	380	July 18, 1972	1130	13.5	23.7	360
Feb. 24, 1972	1300	4.0	22.4	340	Aug. 15, 1972	1130	12.0	24.1	365
Mar. 22, 1972	1030	3.5	31.9	360	Sept.19, 1972	1245	11.5	28.0	350
Apr. 18, 1972	1245	9.5	31.5	350					
04085200 KEWAUNEE RIVER NEAR KEWAUNEE, WIS (LAT 44 27 30 LONG 087 33 23)									
Oct. 18, 1971	1445	13.0	14.2	530	Apr. 17, 1972	1430	9.5	333	440
Nov. 15, 1971	1345	7.0	26.2	660	May 15, 1972	1445	13.5	53.7	600
Dec. 13, 1971	1445	1.0	109	480	June 12, 1972	1345	16.5	37.0	520
Jan. 18, 1972	1330	0.0	29.4	710	July 17, 1972	1400	21.5	20.1	690
Feb. 21, 1972	1345	0.0	31.3	660	Aug. 14, 1972	1315	20.5	24.9	580
Mar. 22, 1972	1240	0.0	2.15	170	Sept.18, 1972	1500	17.0	58.7	610
04086000 SHEBOYGAN RIVER AT SHEBOYGAN, WIS (LAT 43 44 25 LONG 087 45 37)									
Oct. 8, 1971	1300	18.5	39.5	650	Apr. 26, 1972	1515	11.5	510	430
Nov. 10, 1971	1415	4.5	63.3	700	May 8, 1972	1430	11.0	313	640
Dec. 15, 1971	1500	1.5	826	550	June 6, 1972	1000	17.0	86.5	650
Jan. 20, 1972	1530	0.0	83.7	900	July 5, 1972	1230	-	56.9	650
Feb. 29, 1972	1400	0.0	57.1	-	Aug. 30, 1972	0930	21.0	181	695
Mar. 22, 1972	1630	1.5	2,250	300	Sept.19, 1972	1300	17.0	646	520
Mar. 31, 1972	1430	-	561	-	Sept.21, 1972	1200	14.5	1,010	640
04086150 MILWAUKEE RIVER AT KEWASKUM, WIS (LAT 43 31 02 LONG 088 13 24)									
Oct. 7, 1971	1445	15.0	727	750	June 5, 1972	1215	20.0	29.4	650
Jan. 19, 1972	1700	0.0	16.3	750	July 12, 1972	0945	74.0	32.0	650
Feb. 29, 1972	1615	0.0	12.5	-	Sept. 5, 1972	1145	61.0	49.6	715
Apr. 5, 1972	1415	4.0	133	-	Sept. 6, 1972	1515	16.0	298	490
May 11, 1972	1330	14.0	99.1	640	Sept.21, 1972	1500	18.0	1,020	400
04086200 EAST BRANCH MILWAUKEE RIVER NEAR NEW FANE, WIS (LAT 43 33 01 LONG 088 11 18)									
Oct. 7, 1971	1600	13.5	6.86	500	May 11, 1972	1515	16.5	34.1	440
Jan. 21, 1972	1330	0.0	8.29	500	June 5, 1972	1315	18.0	16.3	480
Feb. 29, 1972	1800	0.0	5.36	-	July 12, 1972	1100	23.0	21.7	460
Mar. 22, 1972	1215	0.0	63.1	330	Sept. 5, 1972	1515	18.0	16.6	500
Apr. 5, 1972	1200	-	47.5	-	Sept.19, 1972	1530	17.8	81.0	380
Apr. 25, 1972	1030	6.0	63.1	410	Sept.21, 1972	0915	16.0	130	380
04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WIS (LAT 43 28 58 LONG 088 03 39)									
Oct. 7, 1971	1230	13.5	20.3	670	Apr. 25, 1972	1430	10.0	204	470
Jan. 19, 1972	1415	0.0	22.0	650	June 5, 1972	1515	17.0	53.1	675
Feb. 23, 1972	1200	0.0	25.8	-	July 12, 1972	1315	24.0	45.7	640
Apr. 4, 1972	1715	-	166	-	Sept. 6, 1972	0930	16.0	31.1	700
04086360 MILWAUKEE RIVER AT WAUBEKA, WIS (LAT 43 28 22 LONG 087 59 23)									
Nov. 10, 1971	1130	2.8	103	680	June 5, 1972	1645	17.2	133	700
Jan. 19, 1972	1200	0.0	71.5	650	July 13, 1972	0845	23.9	129	630
Feb. 23, 1972	1530	-	88.1	800	Aug. 31, 1972	1545	23.9	198	695
Apr. 4, 1972	1445	-	422	-	Sept.19, 1972	1000	-	414	-
May 12, 1972	1015	13.9	283	610	Sept.21, 1972	1730	18.3	1,720	430
04087000 MILWAUKEE RIVER AT MILWAUKEE, WIS (LAT 43 06 00 LONG 087 54 32)									
Oct. 6, 1971	1530	17.0	109	590	June 8, 1972	1545	24.0	217	680
Nov. 9, 1971	1430	4.5	166	740	June 27, 1972	1200	21.5	142	560
Dec. 14, 1971	1045	0.5	419	700	July 11, 1972	1230	24.0	274	650
Jan. 18, 1972	1530	0.0	145	900	July 20, 1972	1145	22.0	248	650
Feb. 22, 1972	1145	0.0	125	940	Aug. 9, 1972	1630	19.0	369	640
Apr. 6, 1972	1200	-	661	-	Sept. 6, 1972	1130	20.0	233	740
May 12, 1972	1430	16.5	508	690	Sept.27, 1972	1615	16.0	1,860	600
June 2, 1972	1330	21.0	281	750					

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued									
04087120 MENOMONEE RIVER AT WAUWATOSA, WIS (LAT 43 02 44 LONG 087 54 32)									
Oct. 6, 1971	1245	14.5	17.6	800	May 24, 1972	1230	19.0	34.7	1,300
Nov. 9, 1971	1615	5.0	24.9	1,250	June 2, 1972	0945	18.0	33.9	1,200
Dec. 13, 1971	1630	1.5	102	1,200	July 11, 1972	0930	21.0	22.9	950
Jan. 18, 1972	1200	-	26.0	-	Aug. 9, 1972	1415	18.5	47.5	1,100
Feb. 21, 1972	1530	0.0	39.1	-	Sept.18, 1972	1200	-	2,270	-
Apr. 5, 1972	1715	6.5	103	-	Sept.29, 1972	1615	15.0	662	750
04087204 OAK CREEK AT SOUTH MILWAUKEE, WIS (LAT 42 55 30 LONG 087 52 12)									
Oct. 15, 1971	1515	16.0	1.04	810	June 27, 1972	1515	24.5	4.47	1,080
Nov. 18, 1971	1315	11.0	1.19	1,040	July 19, 1972	1415	23.0	20.4	1,100
Dec. 31, 1971	1145	0.0	38.5	2,000	Aug. 10, 1972	1030	14.5	5.07	1,300
Feb. 15, 1972	1300	0.0	2.42	5,700	Sept.18, 1972	1415	-	750	-
Mar. 27, 1972	1300	4.0	11.9	1,610	Sept.19, 1972	0900	-	538	-
May 16, 1972	1500	16.5	16.9	950	Sept.22, 1972	1200	11.5	144	680
June 7, 1972	1730	24.5	2.67	1,260	Sept.29, 1972	1200	15.0	249	480
June 15, 1972	0645	18.0	63.6	640					
04087220 ROOT RIVER NEAR FRANKLIN, WIS (LAT 42 52 25 LONG 087 59 45)									
Oct. 15, 1971	1345	14.0	1.50	970	Apr. 17, 1972	1500	-	25.3	-
Nov. 2, 1971	1800	9.5	1.32	465	May 16, 1972	1730	19.0	37.9	1,040
Nov. 18, 1971	1600	10.5	4.97	1,130	June 8, 1972	1100	20.0	5.96	1,300
Dec. 16, 1971	1645	-	268	-	June 27, 1972	1730	24.0	7.46	800
Dec. 30, 1971	1400	0.0	65.0	1,210	Aug. 10, 1972	1330	20.0	13.3	1,160
Dec. 31, 1971	0945	0.0	62.9	2,000	Sept.18, 1972	1800	-	2,200	-
Feb. 15, 1972	1530	0.0	3.48	3,000	Sept.29, 1972	1215	15.0	380	570
Mar. 27, 1972	1500	5.5	30.1	1,160					
04087233 ROOT RIVER CANAL NEAR FRANKLIN, WIS (LAT 42 48 55 LONG 087 59 40)									
Oct. 15, 1971	0845	10.5	2.02	1,300	June 8, 1972	1245	18.5	6.98	1,150
Nov. 2, 1971	1515	10.0	1.96	1,330	June 15, 1972	1445	17.5	204	550
Nov. 18, 1971	1445	7.5	1.80	1,440	June 27, 1972	1900	19.5	22.4	970
Dec. 16, 1971	1500	4.0	103	840	July 20, 1972	1715	20.0	83.6	880
Feb. 15, 1972	1700	0.0	2.80	1,550	Aug. 10, 1972	1500	16.5	51.7	900
Mar. 27, 1972	1700	3.5	38.2	800	Sept. 6, 1972	1430	17.5	20.2	1,000
Apr. 17, 1972	1215	8.0	572	425	Sept.18, 1972	1600	-	651	-
Apr. 20, 1972	1145	7.5	204.2	550	Sept.28, 1972	1745	16.0	81.7	750
May 17, 1972	1000	14.5	39.7	960					
04087240 ROOT RIVER AT RACINE, WIS (LAT 42 45 05 LONG 087 49 25)									
Nov. 19, 1971	1345	8.0	6.24	1,150	Apr. 17, 1972	1830	-	1,210	-
Dec. 16, 1971	1215	3.5	380	810	Apr. 18, 1972	1245	-	1,290	-
Dec. 30, 1971	1100	0.0	84.6	1,800	Apr. 20, 1972	1515	10.0	689	510
Feb. 16, 1972	1515	0.0	9.15	2,400	May 17, 1972	1215	16.5	140	1,000
Mar. 28, 1972	0945	3.0	130	880					
04087257 PIKE RIVER NEAR RACINE, WIS (LAT 42 38 49 LONG 087 51 38)									
Oct. 14, 1971	1815	13.0	2.83	520	Apr. 16, 1972	1915	-	1,020	-
Nov. 2, 1971	1300	13.0	47.4	350	Apr. 17, 1972	0915	-	365	-
Nov. 3, 1971	0915	8.0	0.52	400	May 17, 1972	1730	18.0	20.8	870
Nov. 19, 1971	0930	7.0	3.34	660	June 7, 1972	1445	20.0	6.99	760
Dec. 15, 1971	1545	-	179	-	June 15, 1972	0930	17.0	625	410
Dec. 16, 1971	0915	4.0	74.2	870	June 28, 1972	1515	19.0	18.1	910
Dec. 30, 1971	0930	2.0	63.1	630	July 21, 1972	0945	20.5	46.0	850
Feb. 16, 1972	0945	0.0	6.05	1,650	Aug. 11, 1972	1245	18.0	66.5	750
Mar. 28, 1972	1445	6.0	16.7	900	Sept.27, 1972	1715	15.0	51.2	810

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

ST. CROIX RIVER BASIN

05333500 ST. CROIX RIVER NEAR DANBURY, WIS (LAT 46 04 28 LONG 092 14 50)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 1, 1971	0945	16.0	1,220	120	May 25, 1972	1400	24.5	1,320	100
Nov. 8, 1971	1200	1.0	1,790	120	July 5, 1972	1400	18.5	1,180	150
Jan. 10, 1972	1300	0.0	1,150	110	July 25, 1972	1245	20.0	5,360	120
Feb. 4, 1972	1200	0.0	1,010	140	Aug. 11, 1972	1430	20.5	1,790	110
Mar. 16, 1972	1130	0.5	-	120	Sept.21, 1972	1000	14.0	1,850	120
Apr. 20, 1972	1230	3.0	4,430	100					

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WIS (LAT 45 24 25 LONG 092 38 49)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 18, 1971	1100	5.0	12,900	135	June 27, 1972	1130	20.5	5,030	180
Jan. 3, 1972	1230	2.5	4,700	220	July 27, 1972	1100	-	39,400	170
May 18, 1972	1200	19.5	7,460	150	Sept. 9, 1972	1000	15.5	6,060	160

CHIPPEWA RIVER BASIN

05356000 CHIPPEWA RIVER AT BISHOPS BRIDGE NEAR WINTER, WIS (LAT 45 50 57 LONG 091 04 44)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 7, 1971	0900	12.5	228	115	July 6, 1972	1830	19.5	618	90
Dec. 29, 1971	1200	1.5	1,270	70	Aug. 10, 1972	1530	20.5	390	90
Feb. 10, 1972	1500	1.5	1,040	80	Aug. 21, 1972	1300	22.0	5,280	50
Mar. 10, 1972	1400	2.0	305	90	Sept.18, 1972	1100	14.5	560	110
May 29, 1972	0930	13.0	228	60					

05356500 CHIPPEWA RIVER NEAR BRUCE, WIS (LAT 45 27 08 LONG 091 15 39)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 8, 1971	1100	12.0	838	90	May 18, 1972	1630	18.0	702	90
Nov. 17, 1971	1130	5.5	2,080	110	July 5, 1972	1630	20.0	1,150	90
Jan. 13, 1972	1400	0.0	1,580	100	July 25, 1972	1130	22.0	6,000	90
Feb. 28, 1972	1230	0.0	1,280	100	Sept.14, 1972	1430	16.5	1,760	110
Apr. 14, 1972	1000	1.0	4,870	80					

05358500 FLAMBEAU RIVER AT BABBS ISLAND, NEAR WINTER, WIS (LAT 45 46 07 LONG 090 45 41)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 7, 1971	1100	11.5	520	90	Apr. 27, 1972	1200	7.0	1,490	80
Nov. 15, 1971	1330	4.5	755	90	May 26, 1972	1000	20.0	727	100
Jan. 6, 1972	1330	0.0	1,050	90	July 6, 1972	1730	20.0	868	115
Feb. 10, 1972	1300	0.0	889	100	July 20, 1972	1300	22.0	727	110
Mar. 10, 1972	1300	0.0	950	90	Aug. 18, 1972	1500	20.5	5,300	120
Apr. 14, 1972	1200	3.5	1,260	95					

05359500 SOUTH FORK FLAMBEAU RIVER NEAR PHILLIPS, WIS (LAT 45 42 08 LONG 090 36 58)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 7, 1971	1400	12.5	974	90	June 20, 1972	1100	18.0	908	70
Nov. 11, 1971	1300	3.5	480	95	May 26, 1972	1230	23.5	365	70
Jan. 7, 1972	1100	0.0	325	70	July 6, 1972	1400	20.5	419	100
Feb. 10, 1972	1500	0.0	238	125	Aug. 10, 1972	1300	24.5	554	85
Apr. 14, 1972	1100	3.5	1,410	90	Aug. 21, 1972	1530	25.5	3,600	75
Apr. 20, 1972	1330	3.0	5,380	55					

05360500 FLAMBEAU RIVER NEAR BRUCE, WIS (LAT 45 22 21 LONG 091 12 34)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 8, 1971	1400	14.0	1,120	110	July 5, 1972	1630	20.0	1,660	100
Nov. 16, 1971	1600	5.0	1,130	110	July 25, 1972	1500	22.0	4,340	110
Jan. 13, 1972	1100	0.0	988	100	Aug. 4, 1972	1230	21.5	1,630	100
Feb. 25, 1972	1400	0.0	1,050	150	Aug. 23, 1972	1130	16.5	7,380	90
Apr. 4, 1972	1330	1.5	1,780	120	Sept.14, 1972	1230	18.0	3,070	75
May 18, 1972	1130	19.0	1,700	90					

05362000 JUMP RIVER AT SHELDON, WIS (LAT 45 18 29 LONG 090 57 23)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 22, 1971	1500	13.5	316	110	Apr. 17, 1972	1200	4.0	9,280	70
Nov. 29, 1971	1000	0.0	302	130	Apr. 25, 1972	1230	6.5	2,550	70
Dec. 7, 1971	1200	0.0	303	100	May 24, 1972	1100	23.5	242	100
Dec. 28, 1971	1200	0.0	246	100	June 21, 1972	1330	18.5	187	155
Jan. 24, 1972	1200	0.0	117	100	July 28, 1972	1500	22.0	341	120
Feb. 24, 1972	1300	0.0	96	100	Aug. 23, 1972	1530	19.0	1,850	100
Mar. 27, 1972	1230	0.0	-	110	Sept.27, 1972	1200	15.0	5,410	100
Apr. 13, 1972	1600	0.5	4,180	65					

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

CHIPPEWA RIVER BASIN--Continued

05365500 CHIPPEWA RIVER AT CHIPPEWA FALLS, WIS (LAT 44 55 35 LONG 091 24 33)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 12, 1971	1200	14.5	7,910	150	July 5, 1972	1200	20.0	6,780	160
Jan. 10, 1972	1000	1.0	5,320	140	Aug. 4, 1972	1030	21.5	7,990	100

05367425 RED CEDAR RIVER NEAR CAMERON, WIS (LAT 45 24 05 LONG 091 46 38)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Mar. 2, 1972		0.0	249	-	July 14, 1972		21.0	278	-
Apr. 6, 1972		3.0	401	150	July 21, 1972		22.0	417	-
May 18, 1972		23.5	336	160	Aug. 8, 1972		17.5	378	-
June 15, 1972		18.5	298	-	Sept.15, 1972		15.5	257	160
June 28, 1972		19.0	663	-	Sept.26, 1972		13.0	446	190
July 10, 1972		21.5	329	-					

05368000 HAY RIVER AT WHEELER, WIS (LAT 45 02 52 LONG 091 54 39)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 15, 1971	1030	8.5	286	310	Mar. 28, 1972	1130	2.0	520	260
Nov. 18, 1971	1100	6.5	472	360	May 23, 1972	1100	17.0	275	340
Dec. 9, 1971	1200	1.0	293	340	June 28, 1972	1500	17.0	287	290
Dec. 30, 1971	1300	0.0	260	310	July 24, 1972	1600	23.0	1,090	280
Feb. 16, 1972	1500	0.0	218	240	Aug. 2, 1972	1200	22.0	292	300
Mar. 22, 1972	1200	1.0	1,600	160	Sept. 7, 1972	1630	16.0	349	320

05369000 RED CEDAR RIVER AT MENOMONIE, WIS (LAT 44 53 02 LONG 091 55 57)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 13, 1971	1030	12.0	1,460	150	June 28, 1972	1230	21.0	1,460	240
Apr. 4, 1972	0930	2.0	1,480	140	July 28, 1972	1230	21.0	3,570	190
May 24, 1972	1330	21.0	2,440	180	Sept. 7, 1972	1400	20.0	2,870	190
June 20, 1972	1230	20.5	1,860	210					

05369500 CHIPPEWA RIVER AT DURAND, WIS (LAT 44 37 40 LONG 091 58 10)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 14, 1971	1400	13.0	5,000	150	Apr. 3, 1972	1330	1.0	12,800	130
Nov. 17, 1971	1200	7.0	7,270	150	May 23, 1972	1930	21.0	6,290	130
Jan. 11, 1972	1230	0.0	-	90	June 28, 1972	1130	20.5	7,360	180
Jan. 18, 1972	1330	0.0	6,140	110	Aug. 3, 1972	1300	20.0	8,290	150
Feb. 29, 1972	1430	0.0	7,570	130	Sept. 7, 1972	1300	20.0	8,750	120

05370000 EAU GALLE RIVER AT SPRING VALLEY, WIS (LAT 44 51 10 LONG 092 14 17)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 16, 1971	1230	6.0	15.8	340	June 20, 1972	1500	16.5	14.2	340
Dec. 21, 1971	1100	2.0	13.6	100	July 7, 1972	1130	18.5	12.0	280
Mar. 20, 1972	1400	3.0	405	900	Aug. 2, 1972	1430	22.0	14.2	300
Apr. 4, 1972	1030	4.0	19.1	240					

TREMPEALEAU RIVER BASIN

05379400 TREMPEALEAU RIVER AT ARCADIA, WIS (LAT 44 15 15 LONG 091 30 25)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 13, 1971	1415	10.5	325	310	Apr. 13, 1972	1100	7.0	545	270
Nov. 16, 1971	1445	9.0	326	260	May 24, 1972	1000	16.5	302	210
Jan. 5, 1972	1300	0.0	206	-	July 7, 1972	1015	14.5	238	250
Feb. 16, 1972	1215	0.0	249	260	Aug. 22, 1972	1500	20.0	610	155
Mar. 20, 1972	1945	3.0	2,330	120	Sept.25, 1972	1900	-	3,200	-

05379500 TREMPEALEAU RIVER AT DODGE, WIS (LAT 44 07 55 LONG 091 33 14)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 13, 1971	1545	12.0	350	300	Apr. 12, 1972	1645	7.0	560	240
Nov. 16, 1971	1600	8.5	323	240	May 24, 1972	1215	20.0	320	220
Jan. 5, 1972	1130	0.0	221	-	July 6, 1972	1600	17.5	254	240
Feb. 16, 1972	1045	0.0	298	300	Aug. 23, 1972	1000	19.0	583	180
Mar. 21, 1972	1015	1.0	2,620	150					

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

BLACK RIVER BASIN

05381000 BLACK RIVER AT NEILLSVILLE, WIS (LAT 44 33 35 LONG 090 36 54)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 14, 1971	1330	11.5	123	-	Apr. 17, 1972	1645	-	10,470	-
Nov. 11, 1971	1145	2.0	181	260	May 30, 1972	1215	13.5	78.1	120
Jan. 10, 1972	1415	0.0	193	200	June 28, 1972	1345	22.0	38.5	180
Feb. 17, 1972	1130	0.0	67.6	300	Aug. 4, 1972	1215	21.0	326	120
Mar. 17, 1972	1430	0.5	177	200	Sept.19, 1972	1315	18.0	134	100
Apr. 13, 1972	1630	1.5	6,640	120	Sept.26, 1972	1630	11.5	12,700	90

05382000 BLACK RIVER NEAR GALESVILLE, WIS (LAT 44 03 42 LONG 091 17 30)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Jan. 5, 1972	1730	0.0	881	-	Apr. 25, 1972	1300	4.5	9,960	-
Feb. 16, 1972	1100	0.0	648	125	May 24, 1972	1630	21.0	751	110
Apr. 12, 1972	1400	3.0	4,860	90	July 6, 1972	1200	18.0	357	120
Apr. 18, 1972	1530	9.5	14,500	90	Aug. 22, 1972	1130	23.5	1,220	105

WISCONSIN RIVER BASIN

05391000 WISCONSIN RIVER AT RAINBOW LAKE, NEAR LAKE TOMAHAWK, WIS (LAT 45 49 58 LONG 089 32 51)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 5, 1971	1130	14.0	323	70	May 18, 1972	1500	13.0	579	70
Nov. 9, 1971	1130	3.0	642	80	June 28, 1972	1400	13.0	648	50
Mar. 24, 1972	1130	0.5	925	120	Aug. 1, 1972	1230	22.0	494	75
Apr. 13, 1972	1200	1.0	411	80					

05393500 SPIRIT RIVER AT SPIRIT FALLS, WIS (LAT 45 26 58 LONG 089 58 47)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 14, 1971	1400	9.5	39.6	85	Apr. 18, 1972	1330	0.5	1,680	50
Nov. 10, 1971	0930	-	46.0	100	May 22, 1972	1300	-	36.2	100
Dec. 14, 1971	1130	0.0	68.3	100	June 22, 1972	1100	17.0	9.93	140
Feb. 8, 1972	1500	0.0	22.2	100	July 21, 1972	1000	21.5	12.6	140
Mar. 13, 1972	1530	0.0	24.7	100	Aug. 31, 1972	1400	19.0	79.6	160

05394500 PRAIRIE RIVER NEAR MERRILL, WIS (LAT 45 14 09 LONG 089 38 59)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 26, 1971	1400	11.5	126	160	Apr. 18, 1972	1000	3.0	2,140	250
Nov. 17, 1971	1500	4.5	118	170	May 16, 1972	1030	15.5	187	140
Dec. 22, 1971	1100	0.0	146	140	June 6, 1972	1330	21.0	91.4	180
Jan. 5, 1972	1400	0.0	85.4	110	July 26, 1972	1330	18.0	121	140
Feb. 8, 1972	1430	0.0	84	250	Sept. 1, 1972	1030	18.0	178	140
Mar. 15, 1972	1330	0.0	103	170	Sept.28, 1972	1430	10.0	1,160	60
Apr. 16, 1972	1630	3.0	1,020	200					

05395000 WISCONSIN RIVER AT MERRILL, WIS (LAT 45 10 41 LONG 089 40 52)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 4, 1971	1430	12.0	3,240	310	Apr. 17, 1972	1100	3.5	10,300	100
Nov. 15, 1971	1400	5.5	2,170	120	May 23, 1972	1515	19.0	1,500	-
Dec. 22, 1971	1430	0.5	2,770	120	July 6, 1972	1515	20.0	1,770	200
Jan. 17, 1972	1415	0.0	2,370	120	Aug. 18, 1972	0930	21.0	4,790	250
Mar. 3, 1972	1415	0.0	2,190	120	Sept.29, 1972	1115	10.0	12,550	160
Apr. 4, 1972	1430	0.5	1,970	120					

05397500 EAU CLAIRE RIVER AT KELLY, WIS (LAT 44 55 06 LONG 089 33 00)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 8, 1971	1400	0.0	182	100	Apr. 17, 1972	-	3.5	3,600	60
Dec. 21, 1971	1130	0.0	270	130	Apr. 18, 1972	-	-	4,620	80
Jan. 21, 1972	1300	0.0	106	120	May 17, 1972	1230	18.5	216	240
Feb. 22, 1972	1400	0.0	68	-	July 7, 1972	1200	17.0	80	260
Apr. 6, 1972	1400	0.5	224	220	Aug. 2, 1972	1400	21.0	188	200
Apr. 16, 1972	-	2.0	2,200	80	Sept.13, 1972	1000	18.0	153	180

05398000 WISCONSIN RIVER AT ROTHSCHILD, WIS (LAT 44 53 09 LONG 089 38 05)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 10, 1971	1100	15.5	4,970	-	May 16, 1972	1330	23.0	1,900	90
Apr. 17, 1972	1500	4.0	34,900	100	July 7, 1972	1445	21.0	2,340	200

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05399500 BIG EAU PLEINE RIVER NEAR STRATFORD, WIS (LAT 44 49 19 LONG 090 04 46)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 6, 1971	1230	13.5	81.9	170	May 31, 1972	1530	20.5	15.2	160
Nov. 11, 1971	1615	3.0	39.7	180	June 27, 1972	1500	-	4.76	210
Jan. 6, 1972	1500	0.0	34.1	120	Aug. 9, 1972	1400	16.0	495	150
Feb. 17, 1972	1600	0.0	14.6	275	Sept.20, 1972	1500	21.0	198	100
Mar. 17, 1972	1130	0.0	34.0	240	Sept.26, 1972	1315	11.0	12,500	75

05400600 LITTLE PLOVER RIVER NEAR ARNOTT, WIS (LAT 44 28 05 LONG 089 29 20)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 5, 1971	1230	12.0	3.76	340	Apr. 10, 1972	1100	11.0	3.58	420
Nov. 9, 1971	1400	3.0	3.50	350	May 17, 1972	1500	21.5	5.03	260
Dec. 14, 1971	1315	4.0	3.99	400	June 21, 1972	1045	11.5	3.38	320
Jan. 18, 1972	1100	4.0	3.32	350	Aug. 2, 1972	1240	17.0	3.83	365
Feb. 14, 1972	1130	3.5	2.98	340	Sept.14, 1972	1300	12.0	5.04	300
Mar. 13, 1972	1145	4.5	2.47	-					

05400650 LITTLE PLOVER RIVER AT PLOVER, WIS (LAT 44 28 26 LONG 089 31 44)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 5, 1971	1415	11.0	9.00	300	Apr. 10, 1972	1215	1.5	10.2	360
Nov. 9, 1971	1245	6.5	10.2	300	May 17, 1972	1345	15.0	14.0	260
Dec. 14, 1971	1145	3.0	10.8	360	June 21, 1972	0930	10.5	9.58	300
Jan. 18, 1972	1215	4.0	8.56	250	Aug. 2, 1972	1100	11.0	10.3	345
Feb. 14, 1972	1230	4.0	8.18	340	Sept.14, 1972	1145	11.0	12.7	340
Mar. 14, 1972	0930	5.0	8.30	220					

05401020 TENMILE CREEK DITCH 5 NEAR BANCROFT, WIS (LAT 44 18 08 LONG 089 32 59)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 10, 1971	0900	4.5	7.83	300	Apr. 11, 1972	1015	4.0	16.9	220
Dec. 14, 1971	1500	4.0	9.24	280	May 18, 1972	0915	12.0	8.18	320
Jan. 19, 1972	1015	0.0	6.06	300	June 26, 1972	1215	10.5	6.26	320
Feb. 15, 1972	1245	2.0	5.74	280	Aug. 3, 1972	0900	13.0	3.88	320
Mar. 14, 1972	1100	3.5	4.98	-	Sept.15, 1972	0915	13.5	8.73	300
Mar. 20, 1972	1130	5.5	7.36	330					

05401050 TENMILE CREEK NEAR NEKOOSA, WIS (LAT 44 15 44 LONG 089 48 38)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 4, 1971	1045	11.5	49.8	300	Apr. 11, 1972	1545	7.0	119	320
Nov. 10, 1971	1430	5.0	64.2	300	Apr. 14, 1972	1030	4.5	141	320
Dec. 15, 1971	1345	1.5	91.7	280	May 19, 1972	1015	15.5	87.4	310
Jan. 20, 1972	0945	0.5	41.2	250	June 27, 1972	0930	15.0	46.8	260
Feb. 16, 1972	1000	0.5	22.6	320	Aug. 3, 1972	1500	18.5	38.5	280
Mar. 14, 1972	1345	3.5	29.3	280	Sept.15, 1972	1415	18.0	70.2	300

05401100 FOURTEENMILE CREEK NEAR NEW ROME, WIS (LAT 44 12 15 LONG 089 48 29)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 4, 1971	1200	16.5	12.0	320	Apr. 11, 1972	1445	1.5	54.9	380
Nov. 10, 1971	1315	4.0	64.1	300	May 18, 1972	1530	21.0	45.1	170
Dec. 15, 1971	1230	1.0	41.5	280	June 26, 1972	1615	13.5	11.9	300
Jan. 19, 1972	1345	0.5	29.7	280	Aug. 3, 1972	1345	22.0	8.05	190
Feb. 16, 1972	1115	0.5	15.1	320	Sept.15, 1972	1300	19.0	41.1	200
Mar. 14, 1972	1445	1.0	4.87	-					

05401535 BIG ROCHE A CRI CREEK NEAR ADAMS, WIS (LAT 44 05 52 LONG 089 46 30)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 4, 1971	1345	12.0	49.7	280	Apr. 11, 1972	1245	7.0	88.0	250
Nov. 10, 1971	1045	4.0	61.9	240	May 18, 1972	1230	17.0	74.8	260
Dec. 15, 1971	1045	2.0	77.0	270	June 26, 1972	1515	-	53.5	240
Jan. 19, 1972	1245	0.5	50.1	220	Aug. 3, 1972	1130	15.5	41.6	230
Feb. 16, 1972	1300	1.0	39.5	250	Sept.15, 1972	1100	13.0	59.4	240
Mar. 14, 1972	1315	4.0	51.8	280					

05402000 YELLOW RIVER AT BABCOCK, WIS (LAT 44 18 05 LONG 090 07 15)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 14, 1971	1115	9.5	27.6	-	Apr. 5, 1972	1330	1.5	244	140
Nov. 11, 1971	1415	4.5	104	160	Apr. 12, 1972	1345	6.0	2,510	100
Jan. 4, 1972	1245	0.0	42.5	160	May 31, 1972	1230	15.0	25.2	150
Feb. 16, 1972	1515	0.0	44.1	150	June 27, 1972	1230	19.5	11.0	120
Mar. 15, 1972	1115	0.0	55.1	-	Aug. 4, 1972	0945	18.5	34.0	130
					Sept.20, 1972	1145	18.0	88.6	120

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
05403500 LEMONWEIR RIVER AT NEW LISBON, WIS (LAT 43 52 47 LONG 090 09 40)									
Oct. 5, 1971	1530	16.0	452	75	Apr. 13, 1972	1600	5.0	1,140	110
Nov. 17, 1971	1545	-	269	130	May 25, 1972	1230	20.0	163	145
Jan. 4, 1972	1345	0.0	315	95	July 5, 1972	1515	19.5	126	155
Feb. 15, 1972	1445	0.0	170	165	Aug. 24, 1972	0945	19.5	839	115
Mar. 14, 1972	1245	0.0	221	140	Sept.28, 1972	1345	-	4,200	-
05404000 WISCONSIN RIVER NEAR WISCONSIN DELLS, WIS (LAT 43 36 22 LONG 089 45 25)									
Oct. 7, 1971	1215	16.0	9,470	155	June 7, 1972	1215	-	5,850	-
Nov. 18, 1971	1215	8.0	6,350	150	July 11, 1972	1130	24.5	4,220	120
Apr. 11, 1972	1445	5.5	9,270	170	Aug. 28, 1972	1200	17.0	14,500	150
Apr. 20, 1972	1600	-	42,400	-					
05405000 BARABOO RIVER NEAR BARABOO, WIS (LAT 43 28 51 LONG 089 38 09)									
Oct. 8, 1971	1100	13.0	176	340	Apr. 21, 1972	1400	9.0	509	255
Nov. 19, 1971	1300	7.0	323	330	June 7, 1972	1530	21.0	156	335
Jan. 6, 1972	1530	0.0	200	-	July 13, 1972	1200	21.5	184	305
Feb. 15, 1972	1100	0.0	174	-	Aug. 29, 1972	1530	20.5	1,500	200
Mar. 16, 1972	1545	0.0	880	240					
05406500 BLACK EARTH CREEK AT BLACK EARTH, WIS (LAT 43 08 03 LONG 089 43 56)									
Oct. 6, 1971	1630	11.0	23.7	520	Mar. 12, 1972	0945	-	58.2	-
Oct. 20, 1971	1545	15.0	25.6	510	Mar. 17, 1972	1800	-	317	-
Nov. 29, 1971	0945	3.0	23.3	500	Apr. 24, 1972	0915	6.0	40.5	500
Dec. 16, 1971	0930	-	49.1	-	June 8, 1972	1030	14.5	25.6	510
Jan. 10, 1972	1100	4.5	26.5	-	July 13, 1972	1530	20.5	23.2	500
Feb. 22, 1972	1630	3.5	22.0	600	Aug. 30, 1972	1530	19.0	29.6	500
05406640 OTTER CREEK NEAR HIGHLAND, WIS (LAT 43 01 40 LONG 090 16 40)									
Nov. 10, 1971	1545	8.0	1.41	480	Apr. 24, 1972	1130	8.0	12.4	-
Dec. 21, 1971	1115	2.0	1.52	500	May 23, 1972	1115	16.0	5.79	580
Jan. 27, 1972	1545	0.0	1.70	-	June 28, 1972	1145	0.12	3.42	580
Mar. 16, 1972	0730	3.0	24.4	420	Aug. 9, 1972	1015	15.0	5.53	460
Mar. 16, 1972	1730	3.0	35.0	220	Sept.21, 1972	1730	-	8.01	-
05407000 WISCONSIN RIVER AT MUSCODA, WIS (LAT 43 11 54 LONG 090 26 26)									
Oct. 12, 1971	1445	12.0	7,260	200	May 8, 1972	1530	13.0	14,800	140
Nov. 16, 1971	1245	-	7,400	-	June 27, 1972	1430	-	6,220	-
Jan. 18, 1972	1515	0.0	8,930	-	Aug. 9, 1972	1500	21.0	4,830	210
Apr. 10, 1972	1445	-	13,200	-					
05408000 KICKAPOO RIVER AT LA FARGE, WIS (LAT 43 34 27 LONG 090 38 35)									
Oct. 21, 1971	1145	-	106	-	Mar. 21, 1972	1030	2.0	1,930	-
Nov. 24, 1971	1700	-	45.4	-	Apr. 26, 1972	1445	10.5	196	-
Jan. 19, 1972	1430	0.0	156	370	June 2, 1972	0830	-	107	-
Feb. 24, 1972	1430	0.0	124	-	July 14, 1972	1000	-	102	-
Mar. 20, 1972	1500	2.0	1,260	-	Aug. 25, 1972	0745	-	129	-
05410000 KICKAPOO RIVER AT GAYS MILLS, WIS (LAT 43 19 10 LONG 090 51 08)									
Oct. 7, 1971	1445	12.0	242	480	Apr. 25, 1972	1545	10.5	567	470
Nov. 10, 1971	1545	-	296	-	May 31, 1972	1545	18.0	375	470
Jan. 10, 1972	1145	0.0	384	-	July 5, 1972	1630	-	226	-
Feb. 23, 1972	1545	0.0	372	480	Aug. 30, 1972	1030	-	413	-
Mar. 17, 1972	1315	2.0	1,660	230					
05410500 KICKAPOO RIVER AT STEUBEN, WIS (LAT 43 11 27 LONG 090 52 28)									
Oct. 8, 1971	0945	-	326	-	Apr. 25, 1972	1115	3.0	688	390
Dec. 1, 1971	1345	-	383	-	May 31, 1972	1145	9.5	385	430
Jan. 10, 1972	1600	-	346	-	July 14, 1972	1345	15.5	393	-
Mar. 17, 1972	1545	-	2,070	220	Aug. 24, 1972	1430	-	504	-

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

GRANT RIVER BASIN

05413500 GRANT RIVER AT BURTON, WIS (LAT 42 43 13 LONG 090 49 09)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 9, 1971	1330	3.0	120	550	Apr. 11, 1972	1215	8.0	150	-
Dec. 16, 1971	1200	3.0	301	345	Apr. 18, 1972	1315	11.0	140	-
Jan. 26, 1972	1630	0.0	63.6	-	May 18, 1972	1200	19.0	142	580
Mar. 6, 1972	1400	0.0	88.4	540	June 8, 1972	1200	-	104	-
Mar. 13, 1972	1045	-	1,820	-	June 26, 1972	1200	21.0	92.3	590
Apr. 4, 1972	0900	4.0	120	-	Sept.18, 1972	1300	20.0	238	590

PLATTE RIVER BASIN

05414000 PLATTE RIVER NEAR ROCKVILLE, WIS (LAT 42 43 52 LONG 090 38 25)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 2, 1971	1010	12.0	302	-	Apr. 18, 1972	1415	11.0	94.0	-
Nov. 9, 1971	1530	4.0	69.9	560	May 18, 1972	1330	21.0	102	560
Dec. 16, 1971	1515	3.0	186	400	June 8, 1972	1430	14.0	70.7	-
Jan. 27, 1972	1230	0.0	49.2	-	June 26, 1972	1416	22.0	57.6	550
Feb. 8, 1972	1545	0.0	37.4	-	July 6, 1972	1430	-	59.6	-
Mar. 13, 1972	1645	-	301	-	Aug. 8, 1972	1545	18.0	119	520
Apr. 4, 1972	1100	-	76.2	-	Aug. 29, 1972	1400	20.0	78.4	-
Apr. 12, 1972	1630	8.0	82.2	510	Sept.18, 1972	1530	21.0	101	560

GALENA RIVER BASIN

05415000 GALENA RIVER AT BUNCOMBE, WIS (LAT 42 30 49 LONG 090 22 40)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 10, 1971	1100	3.0	27.8	820	Apr. 13, 1972	1030	11.0	52.2	710
Dec. 20, 1971	1345	0.0	50.4	800	May 19, 1972	1030	21.0	58.0	820
Feb. 1, 1972	1445	0.0	27.3	-	June 29, 1972	1245	23.5	28.8	800
Mar. 7, 1972	1130	0.0	366	400	Aug. 11, 1972	1200	18.0	464	725
Mar. 14, 1972	1330	0.5	74.2	490	Sept.19, 1972	1015	18.5	104	780

ROCK RIVER BASIN

05426000 CRAWFISH RIVER AT MILFORD, WIS (LAT 43 06 00 LONG 088 50 58)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 4, 1971	1645	6.0	145	600	May 4, 1972	1730	14.5	831	700
Dec. 13, 1971	1045	0.0	133	650	June 1, 1972	0945	16.0	138	640
Jan. 17, 1972	1115	0.0	111	900	July 10, 1972	1000	21.0	83.8	640
Mar. 1, 1972	1400	0.0	101	-	Aug. 28, 1972	1300	21.5	602	580
Mar. 24, 1972	1400	0.5	1,940	575					

05429500 YAHARA RIVER NEAR MC FARLAND, WIS (LAT 43 00 32 LONG 089 18 18)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Oct. 20, 1971	1645	19.0	19.8	400	May 12, 1972	1445	14.0	140	450
Nov. 12, 1971	1530	5.5	132	450	June 1, 1972	1530	24.0	34.4	420
Dec. 3, 1971	1700	-	104	-	June 13, 1972	1515	24.0	116	370
Dec. 17, 1971	1615	-	22.9	-	June 22, 1972	1600	22.0	69.6	360
Jan. 7, 1972	1515	-	125	-	July 5, 1972	1630	21.5	33.8	400
Jan. 28, 1972	1645	-	138	-	July 19, 1972	1600	22.5	41.1	415
Feb. 17, 1972	0915	1.0	144	-	Aug. 7, 1972	1515	21.0	48.7	410
Mar. 10, 1972	1600	-	119	-	Aug. 23, 1972	1045	-	44.0	-
Mar. 23, 1972	1545	-	253	-	Aug. 28, 1972	1045	-	139	-
Apr. 3, 1972	1045	3.0	288	440	Sept.13, 1972	1500	20.5	119	-
Apr. 13, 1972	1600	6.0	316	420	Sept.26, 1972	1030	18.5	164	390
Apr. 27, 1972	1545	8.0	259	420					

MISCELLANEOUS ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

ROCK RIVER BASIN--Continued

05430500 ROCK RIVER AT AFTON, WIS (LAT 42 36 33 LONG 089 04 14)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 11, 1971	1215	4.5	804	700	May 15, 1972	1200	14.5	3,910	520
Dec. 28, 1971	1500	0.5	1,670	680	June 28, 1972	1600	21.0	982	700
Feb. 10, 1972	1245	0.0	475	800	Aug. 8, 1972	1345	19.0	676	660
Mar. 28, 1972	1230	2.0	3,630	480	Sept.26, 1972	1130	13.5	4,920	640

05431500 TURTLE CREEK NEAR CLINTON, WIS (LAT 42 35 47 LONG 088 51 50)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 11, 1971	1645	7.0	54.2	710	May 19, 1972	1200	19.0	134	620
Dec. 28, 1971	1700	0.0	107	740	June 29, 1972	1215	18.5	71.2	650
Feb. 10, 1972	1500	0.0	43.6	800	Aug. 8, 1972	1530	17.0	311	580
Mar. 28, 1972	1430	6.0	88.4	570	Sept.26, 1972	1500	18.5	468	590

05432500 PECATONICA RIVER AT DARLINGTON, WIS (LAT 42 40 40 LONG 090 07 07)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 10, 1971	1315	3.0	89.6	600	Apr. 24, 1972	1330	-	229	-
Dec. 21, 1971	1400	0.5	130	580	May 19, 1972	1215	22.0	135	630
Feb. 2, 1972	1015	0.0	74.6	580	June 27, 1972	1230	22.0	70.9	625
Mar. 14, 1972	1730	-	822	-	Aug. 10, 1972	1300	18.0	116	-
Mar. 16, 1972	1245	-	1,610	-	Sept.21, 1972	0930	19.5	189	610

05433000 EAST BRANCH PECATONICA RIVER NEAR BLANCHARDVILLE, WIS (LAT 42 47 10 LONG 089 51 40)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 12, 1971	0945	9.0	81.3	500	May 19, 1972	1445	21.5	124	540
Dec. 17, 1971	1030	0.0	151	440	June 27, 1972	1500	22.0	77.7	650
Jan. 31, 1972	1115	0.0	74.7	-	Aug. 10, 1972	1530	19.0	75.5	650
Mar. 6, 1972	1730	0.0	78.9	460	Sept.19, 1972	1500	16.5	116	535
Apr. 14, 1972	1315	10.5	124	490					

05434500 PECATONICA RIVER AT MARTINTOWN, WIS (LAT 42 30 34 LONG 089 47 58)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 11, 1971	1430	3.5	361	560	May 22, 1972	1415	23.0	550	610
Dec. 17, 1971	1330	0.0	1,371	420	June 27, 1972	1030	21.0	361	570
Jan. 31, 1972	1345	0.0	276	560	Aug. 10, 1972	1100	-	589	-
Apr. 13, 1972	1330	11.0	584	450	Sept.20, 1972	1430	-	942	-
Apr. 18, 1972	1000	13.0	1,470	-					

05436500 SUGAR RIVER NEAR BRODHEAD, WIS (LAT 42 36 42 LONG 089 23 53)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 11, 1971	1100	4.5	206	520	May 22, 1972	1030	24.0	295	540
Dec. 17, 1971	1530	0.0	741	-	June 28, 1972	1515	26.0	189	530
Feb. 1, 1972	1030	0.0	159	-	Aug. 9, 1972	1445	19.0	256	490
Mar. 7, 1972	1515	0.0	204	520	Sept.20, 1972	1045	21.0	343	540
Apr. 14, 1972	1100	10.5	328	480					

ILLINOIS RIVER BASIN

05543830 FOX RIVER AT WAUKESHA, WIS (LAT 43 00 17 LONG 088 14 37)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Nov. 9, 1971	1215	4.0	24.4	1,050	June 1, 1972	1700	20.0	67.7	900
Dec. 13, 1971	1445	1.0	140	860	July 10, 1972	1500	23.0	43.1	750
Jan. 17, 1972	1530	0.0	30.8	-	Aug. 9, 1972	1145	17.0	74.5	860
Feb. 21, 1972	1200	1.0	35.1	1,100	Sept.21, 1972	1900	-	974	-
Apr. 6, 1972	1545	-	155	-	Sept.22, 1972	1015	16.0	1,010	-
May 24, 1972	1530	24.0	7.76	850	Sept.27, 1972	1245	15.5	509	600

05546500 FOX RIVER AT WILMOT, WIS (LAT 42 30 40 LONG 088 10 45)

Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance	Date	Time	Water temperature (°C)	Discharge (cfs)	Specific conductance
Mar. 29, 1972	1445	2.0	1,270	560	Sept.27, 1972	1500	17.0	2,760	525

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE SUPERIOR

04025500 - BOIS BRULE R. AT BRULE, WIS. (LAT 46 32 16 LONG 091 35 43)

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT., 1971					
02...	--	--	240	11	7.1
04...	1200	--	212	4	2.6
08...	1500	--	192	10	5.2
15...	1330	--	169	4	1.8
22...	1015	--	272	5	3.7
29...	1630	--	345	6	5.6
NOV.					
05...	1545	--	350	6	5.7
06...	0800	--	218	3	1.8
09...	1150	--	247	13	8.7
11...	1455	--	263	5	3.6
19...	1620	--	379	8	8.2
29...	0750	--	224	4	2.4
DEC.					
02...	1100	--	208	4	2.2
13...	0820	--	314	4	3.4
21...	0945	--	500	1	1.3
MAR., 1972					
15...	1200	--	154	10	4.2
APR.					
18...	1250	--	383	16	17
18...	1505	--	383	58	60
19...	1530	--	469	48	61
20...	1630	--	623	74	124
21...	1605	--	658	26	46
22...	1630	--	558	21	32
23...	1625	--	500	16	22
24...	1625	--	496	20	27
25...	1555	--	492	25	33
26...	1740	--	496	20	27
27...	1604	--	498	14	19
MAY					
26...	1150	16.5	186	10	5.0
JULY					
06...	0830	14.5	176	5	2.4

DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
APR.									
19...	1530	469	48	61	15	26	33	44	60

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR.				
19...	73	87	96	100

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
APR.												
19...	1210	0	0	4	48	67	76	84	92	100	--	--
JULY												
06...	1200	0	0	2	6	8	12	14	19	39	74	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE SUPERIOR--Continued

04026005 - BOIS BRULE RIVER NR. LAKE SUPERIOR, WIS. (LAT 46 42 20 LONG 091 36 07)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT., 1971					
04...	1400	--	208	18	10
NOV.					
09...	1320	--	440	20	24
APR., 1972					
19...	1030	6.0	749	71	144
MAY					
26...	0950	15.5	193	14	7.3
JULY					
06...	0930	15.0	192	12	6.2
AUG.					
10...	--	18.5	194	8	4.2
SEP.					
21...	0835	10.5	411	98	109

DATE	TIME	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
APR.									
19...	1030	749	71	144	18	29	32	39	47

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
APR.			
19...	78	97	100

04026870 - ALDER CREEK NR. UPSON, WIS. (LAT 46 23 09 LONG 090 24 30)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
MAY , 1972					
15...	1500	14.0	21	2	.12
JULY					
07...	1130	18.5	7.4	4	.08
AUG.					
16...	1945	--	270	12	8.7
16...	2000	--	322	15	13
17...	0745	--	658	14	25
17...	0900	17.0	650	6	11

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE SUPERIOR--Continued

04027000 - BAD RIVER NR. ODANAH, WIS. (LAT 46 29 15 LONG 090 41 45)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT., 1971					
05...	1100	--	595	17	27
NOV.					
10...	1000	--	433	10	12
22...	1420	--	842	28	64
DEC.					
04...	0920	--	585	6	9.5
APR., 1972					
19...	1205	--	3700	270	2700
19...	1245	--	3700	346	3460
19...	1300	--	3700	255	2550
27...	1835	--	4000	490	5290
30...	1340	--	4550	468	5750
MAY					
07...	1425	--	2200	70	416
13...	1235	--	715	173	334
16...	1115	--	580	56	88
20...	1830	--	360	10	9.7
21...	1340	--	350	12	11
24...	1315	--	10	8	.22
30...	1425	--	1070	90	260
JUNE					
04...	1310	--	260	11	7.7
07...	1035	--	203	5	2.7
13...	1200	--	160	17	7.3
18...	1700	--	243	14	9.2
25...	1700	--	1370	16	59
26...	1215	--	1320	15	53
30...	1230	--	974	33	87
JULY					
02...	2045	--	974	16	42
05...	1210	--	285	8	6.2
08...	1335	--	194	7	3.7
14...	1220	--	146	40	16
16...	1330	--	141	8	3.0
22...	1030	--	5310	1060	15200
27...	1200	--	348	11	10
28...	1930	--	1330	84	302
29...	0955	--	1010	50	136
AUG.					
02...	1405	--	410	15	17
14...	1210	--	336	7	6.4
29...	1055	--	764	26	54
SEP.					
03...	1530	--	368	38	38
10...	1430	--	310	10	8.4

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
APR.									
19...	1245	3700	346	3460	18	23	27	35	45

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR.				
19...	65	79	92	100

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
STREAMS TRIBUTARY TO LAKE MICHIGAN					
04071000 - OCONTO RIVER NR. GILLETT, WIS. (LAT 44 51 53 LONG 088 18 00)					
OCT., 1971					
27...	1130	--	504	8	11
FEB., 1972					
25...	1200	--	360	8	7.8
JUNE					
29...	1515	--	384	1	1.0
JULY					
27...	1415	--	411	2	2.2
SEP.					
27...	1400	13.0	836	22	50
04071858 - PENSAUKEE RIVER NEAR PENSAUKEE, WISCONSIN (LAT 44 49 08 LONG 087 57 12)					
AUG., 1972					
27...	1700	--	83	24	5.4
SEP.					
03...	1500	--	18	19	.92
09...	1530	--	120	3	.97
16...	1500	--	18	72	3.5
30...	1315	--	580	23	36
04073050 - GRAND RIVER NR. KINGSTON, WIS. (LAT 43 41 09 LONG 089 05 09)					
NOV., 1971					
11...	1300	5.0	16	44	1.9
JAN., 1972					
24...	1230	--	11	5	.16
MAR.					
21...	1200	--	485	98	128
22...	1520	--	485	82	107
23...	1225	--	301	259	210
23...	1410	--	329	304	270
MAY					
05...	1330	--	30	27	2.2
JULY					
14...	1100	--	20	4	.22
SEP.					
01...	1200	--	32	18	1.6
18...	1150	17.0	364	252	248
18...	1250	17.0	360	234	227
18...	1420	17.0	356	286	275
18...	1625	--	345	274	255
19...	1440	--	164	66	29
04074950 - WOLF RIVER AT LANGLADE, WIS. (LAT 45 11 24 LONG 088 44 00)					
JUNE, 1972					
27...	1255	--	247	4	2.7
04078500 - EMBARRASS RIVER NR. EMBARRASS, WIS. (LAT 44 43 29 LONG 088 44 10)					
FEB., 1972					
11...	1500	--	126	2	.68
APR.					
18...	1400	--	2410	28	182
18...	1715	--	2410	34	221
JUNE					
26...	1355	--	132	8	2.9
AUG.					
04...	1200	--	162	2	.87
SEP.					
05...	1500	--	222	7	4.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

04078500 - EMBARRASS RIVER NR. EMBARRAS, WIS. (LAT 44 43 29 LONG 088 44 10)

DATE	TIME	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
APR.									
18...	1400	2410	28	182	0	6	17	27	35

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR.				
18...	43	53	74	100

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
APR.												
18...	1545	0	0	1	10	14	17	26	42	71	71	100

04085200 - KEWAUNEE RIVER NR. KEWAUNEE, WIS. (LAT 44 27 42 LONG 087 32 40)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT., 1971					
18...	1340	--	14	3	.12
NOV.					
15...	1230	--	26	54	3.8
DEC.					
13...	1230	--	109	22	6.5
JAN., 1972					
18...	1215	--	29	168	13
MAR.					
11...	1800	--	635	50	86
23...	1700	--	1910	16	83
24...	1400	--	2050	18	100
APR.					
02...	1100	--	272	4	2.9
09...	1130	--	178	6	2.9
17...	1500	--	329	14	12
18...	1730	--	284	14	11
22...	1100	--	427	54	62
22...	1900	--	591	64	102
23...	0800	--	805	60	130
23...	1900	--	619	32	53
24...	0900	--	427	15	17
30...	1000	--	96	9	2.3
MAY					
07...	1100	--	310	2	1.7
27...	1000	--	21	10	.57
JUNE					
04...	1100	--	52	58	8.1
12...	1245	--	37	10	1.0
18...	1100	--	16	12	.53

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

04085200 - KEWAUNEE RIVER NR. KEWAUNEE, WIS. (LAT 44 27 42 LONG 087 32 49)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
JULY, 1972					
02...	0800	--	16	24	1.0
15...	1100	--	23	27	1.7
17...	1300	--	19	86	4.4
21...	0800	--	50	28	3.8
30...	1100	--	12	12	.39
AUG.					
04...	1130	--	20	10	.54
07...	1130	--	38	34	3.5
08...	0800	--	50	39	5.3
09...	0800	--	91	18	4.4
19...	0800	--	211	72	41
25...	1600	--	204	44	24
SEP.					
02...	1600	--	166	100	45
18...	1730	--	59	22	3.5
26...	1600	--	267	76	55
29...	1600	--	825	172	383
30...	0930	--	565	88	134

04085281 - EAST TWIN RIVER AT MISHICOT, WIS. (LAT 44 14 13 LONG 087 38 19)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
JULY, 1972					
13...	1620	--	38	14	1.4
AUG.					
31...	1130	--	24	18	1.2
SEP.					
19...	1015	--	325	110	7.4

04086150 - MILWAUKEE RIVER AT KEWASKUM, WIS. (LAT 43 31 02 LONG 088 13 22)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT., 1971					
07...	1400	15.0	7.3	8	.16
* APR., 1972					
05...	1415	--	132	0	.00
MAY					
11...	1325	14.5	99	7	1.9
JUNE					
05...	1205	--	29	11	.86
JULY					
12...	0945	--	32	8	.69
SEP.					
05...	1045	--	49	25	3.3
18...	1230	--	428	53	61
18...	1450	--	428	38	44
21...	1200	--	713	49	94

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
OCT.											
07...	--	0	1	2	15	26	33	43	58	77	93
SEP.											
21...	1215	10	14	24	53	75	86	92	95	97	100

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

04086200 - EAST BRANCH MILWAUKEE R. AT NEW FANE, WIS. (LAT 43 33 01 LONG 088 11 10)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT., 1971 07...	1600	13.0	6.9	8	.16
APR., 1972 25...	1055	--	63	6	1.0
JUNE 05...	1315	--	16	10	.43
JULY 12...	1110	--	22	2	.12
SEP. 21...	1400	20.0	65	4	.70

DATE	TIME	DIS-CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM
OCT. 07...	--	6.8	2	3	4	7	11
SEP. 21...	1400	65	0	0	0	0	1

DATE	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
OCT. 07...	15	20	39	90	100	--
SEP. 21...	2	3	8	21	51	100

04086340 - NORTH BRANCH MILWAUKEE R. NR. FILLMORE, WIS. (LAT 43 28 58 LONG 088 03 39)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT., 1971 07...	1200	13.0	20	36	1.9
APR., 1972 05...	1000	.0	139	4	1.5
25...	1450	--	204	6	3.3
MAY 11...	1700	16.5	92	94	23
JUNE 05...	1300	--	53	44	6.3
JULY 12...	1300	24.0	45	26	3.2
SEP. 06...	0745	--	31	112	9.4
21...	1530	--	640	51	88

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

04086340 - NORTH BRANCH MILWAUKEE R. NR. FILLMORE, WIS. (LAT 43 28 58 LONG 088 03 39)

DATE	TIME	DIS-CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
OCT. 07...	--	20.3	1	2	7	27	37	47	64	89	100
SEP. 21...	1500	730	2	7	31	74	89	97	99	100	--

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
04086360 - MILWAUKEE RIVER AT WAUBEKA, WIS. (LAT 43 28 22 LONG 087 59 23)					
MAR., 1972 22...	1600	--	3320	84	753
SEP. 19...	1000	--	424	48	55
21...	1730	--	1720	149	692
04087220 - ROOT RIVER NR. FRANKLIN, WIS. (LAT 42 52 25 LONG 087 59 45)					
DEC., 1971 30...	1355	--	65	62	11
JAN., 1972 21...	1400	--	9.2	12	.30
FEB. 15...	1540	--	3.5	10	.09
MAR. 27...	1500	--	30	10	.81
APR. 17...	1515	--	240	67	44
MAY 16...	1645	19.0	38	20	2.1
JUNE 08...	1115	20.0	6.0	36	.58
15...	1520	--	149	73	29
27...	1735	24.0	7.5	64	1.3
JULY 20...	1535	25.0	18	66	3.2
AUG. 10...	1320	--	13	52	1.9
SEP. 06...	1310	19.0	10	100	2.8
21...	1250	--	951	100	257
29...	1010	15.0	380	155	159
0408723[illegible] - ROOT RIVER CANAL NR. FRANKLIN, WIS. (LAT 42 48 55 LONG 087 59 40)					
OCT., 1971 15...	1320	--	1.5	45	.18
NOV. 02...	1745	--	130	280	98
04087240 - ROOT RIVER AT RACINE, WIS. (LAT 42 45 05 LONG 087 49 25)					
DEC., 1971 16...	1030	--	380	291	299
30...	1100	--	85	33	7.6
FEB., 1972 16...	1510	--	9.2	13	.32
MAR. 28...	0845	--	126	16	5.4
APR. 17...	1850	--	1200	662	2150
18...	1215	--	1310	399	1410
20...	1440	--	689	141	262
MAY 17...	1125	17.0	140	21	7.9

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

04087240 - ROOT RIVER AT RACINE, WIS. (LAT 42 45 05 LONG 087 49 25)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
JUNE					
15...	1235	19.5	380	260	267
28...	0940	20.0	60	94	15
JULY					
20...	1815	23.0	236	182	116
AUG.					
10...	1800	--	124	121	41
SEP.					
06...	1510	20.0	60	136	22
21...	1600	--	2190	182	1080
28...	1320	16.0	306	44	36

DATE	TIME	DIS- CHARGE (CFS)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR.											
17...	1850	1200	80	91	94	96	97	98	99	100	--
18...	1215	1310	75	85	88	92	94	96	97	99	100
20...	1440	690	75	91	91	95	97	98	100	--	--

04087257 - PIKE RIVER NR. RACINE, WIS. (LAT 42 38 49 LONG 087 51 38)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV., 1971					
02...	1220	--	48	254	33
DEC.					
15...	1600	--	179	475	230
16...	0910	--	74	96	19
30...	0920	--	63	327	56
30...	1100	--	85	33	7.6
FEB., 1972					
16...	0950	--	6.0	8	.13
MAR.					
28...	1435	--	17	27	1.2
APR.					
16...	1845	--	1020	2820	7770
17...	0855	--	365	516	509
MAY					
17...	1735	18.0	21	8	.45
24...	1915	--	14	4	.16
JUNE					
01...	1930	--	12	4	.13
07...	1345	20.0	7.0	6	.11
15...	0740	--	293	274	217
15...	0930	18.5	590	613	977
23...	1900	--	48	37	4.9
28...	1430	19.0	18	31	1.5
29...	2000	--	20	26	1.4
JULY					
05...	1910	--	12	18	.58
13...	2000	--	21	22	1.2
15...	2010	--	393	476	505
21...	0915	20.5	46	52	6.5
21...	1315	--	28	52	3.9
28...	1810	--	15	26	1.1
AUG.					
10...	1750	--	3.0	36	.29
11...	1245	--	66	40	7.1
17...	1930	--	74	80	16
24...	1915	--	37	38	3.8
SEP.					
02...	1330	--	28	88	6.7
06...	1610	19.0	17	24	1.2
13...	1615	--	558	234	353

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

04087257 - PIKE RIVER NR. RACINE, WIS. (LAT 42 38 49 LONG 087 51 38)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
SEP., 1972					
27...	1630	15.5	51	63	8.7
28...	1110	15.0	47	62	5.3

DATE	TIME	DIS-CHARGE (CFS)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR.											
16...	1845	980	62	78	88	93	95	98	99	99	100
17...	0855	362	71	79	84	92	94	97	97	97	100

CHIPPEWA RIVER BASIN

05356500 - CHIPPEWA RIVER NR. BRUCE, WIS. (LAT 45 27 08 LONG 091 15 39)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
APR., 1972					
18...	1510	4.5	8220	14	311

05359500 - SOUTH FORK FLAMBEAU RIVER NR. PHILLIPS, WIS. (LAT 45 42 08 LONG 090 36 58)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT., 1971					
07...	1200	--	974	6	16
15...	1415	--	622	9	15
22...	1515	--	516	5	7.0
29...	1330	--	530	6	8.6
NOV.					
05...	1530	--	938	4	10
11...	1305	--	460	1	1.2
12...	1430	--	439	4	4.7
19...	1435	--	986	4	11
26...	1515	--	686	1	1.9
DEC.					
03...	1500	--	464	2	2.5
13...	1600	--	968	5	13
MAR., 1972					
06...	1545	--	1270	0	.00
14...	0840	--	1290	0	.00
20...	0825	--	676	0	.00
27...	0835	--	794	1	2.1
APR.					
03...	0950	--	652	0	.00
10...	0820	--	521	0	.00
14...	1120	--	1480	9	36
17...	0915	--	2780	8	60
19...	1120	3.5	5150	16	222
24...	0930	--	3330	6	54
24...	1730	--	2960	6	48
MAY					
01...	0900	--	2150	6	35
01...	1600	--	2150	5	29
09...	0725	--	1350	7	26
09...	1600	--	1350	4	15
16...	0830	--	833	3	6.7
16...	1600	--	833	3	6.7
23...	0905	--	430	4	4.6
26...	1230	23.5	348	4	3.8
30...	1530	--	325	6	5.3
JUNE					
07...	1625	--	246	6	4.0
20...	1530	--	856	6	14
21...	1500	--	1070	8	23

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

CHIPPEWA RIVER BASIN--Continued

05359500 - SOUTH FORK FLAMBEAU RIVER NR. PHILLIPS, WIS. (LAT 45 42 08 LONG 090 36 58)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
JUNE, 1972					
22...	1430	--	950	6	15
JULY					
06...	1415	20.5	439	6	7.1
11...	0900	--	325	4	3.5
19...	0845	--	447	7	8.4
25...	0810	--	1480	8	32
AUG.					
02...	0835	--	481	4	5.2
15...	0925	--	413	3	3.3
19...	1700	--	3120	8	67
21...	1600	--	3850	8	83
22...	1530	--	2920	8	63
23...	0825	--	2480	8	54
24...	1540	--	1900	6	31
25...	1400	--	1670	8	36
26...	1430	--	1660	30	134
SEP.					
12...	0820	--	722	12	23
18...	1600	--	480	7	9.1
27...	1600	--	.14	12	.00

05368000 - HAY RIVER AT WHEELER, WIS. (LAT 45 02 52 LONG 091 54 39)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT., 1971					
22...	0930	--	285	48	37
DEC.					
09...	1030	--	293	6	4.7
MAR., 1972					
20...	1200	--	431	56	65
21...	1740	--	1290	177	616
21...	1745	--	1360	431	1580
22...	0945	--	1720	192	892
22...	1255	--	1780	210	1010
MAY					
23...	1000	17.0	292	36	28
JUNE					
12...	1100	18.5	238	41	26
28...	1455	17.0	250	42	28
JULY					
24...	1400	23.0	1330	121	435
24...	1610	23.0	1320	148	527
SEP.					
07...	1530	16.0	382	22	23

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
MAR.												
21...	1745	1360	431	1580	7	11	13	16	20	24	29	40

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
SEP.												
07...	1200	1	4	18	43	57	65	71	79	89	92	100

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
TREMPEALEAU RIVER BASIN					
05379400 - TREMPEALEAU RIVER AT ARCADIA, WIS. (LAT 44 15 15 LONG 091 30 25)					
MAR., 1972					
20...	1100	--	2210	500	2980
20...	1435	--	2330	607	3820
20...	1615	--	2370	836	5350
21...	0800	--	2560	930	6430
22...	0930	--	2630	462	3280
28...	1500	--	498	74	100
APR.					
09...	1500	--	371	46	46
12...	0950	--	544	155	228
19...	1500	--	785	966	2050
MAY					
09...	2000	--	294	89	71
24...	1015	--	279	102	77
JUNE					
02...	1500	--	247	74	49
20...	1500	--	267	128	92
26...	1500	--	219	79	47
JULY					
07...	1020	--	235	71	45
12...	1500	--	436	463	545
22...	1500	--	300	128	104
AUG.					
03...	1500	--	294	77	61
06...	1215	26.0	348	531	499
09...	1715	--	946	544	1390
19...	1500	--	408	934	1030
SEP.					
16...	1500	--	300	96	78
22...	1500	--	3320	654	5860
WISCONSIN RIVER BASIN					
05393500 - SPIRIT RIVER AT SPIRIT FALLS, WIS. (LAT 45 26 58 LONG 089 58 47)					
OCT., 1971					
14...	1335	10.0	40	6	.65
NOV.					
10...	1000	--	46	5	.62
DEC.					
14...	1200	--	68	21	3.9
FEB., 1972					
08...	1515	--	22	5	.30
JUNE					
22...	1100	--	10	5	.13
JULY					
21...	1010	21.0	12	4	.13
05394500 - PRAIRIE RIVER NR. MERRILL, WIS. (LAT 45 14 09 LONG 089 38 59)					
APR., 1972					
16...	1650	--	1000	16	43
JUNE					
06...	1410	--	87	3	.70
SEP.					
01...	1100	17.5	170	8	3.7
28...	1505	--	1120	9	27

WISCONSIN RIVER BASIN--Continued

05397500 - EAU CLAIRE RIVER AT KELLY, WIS. (LAT 44 55 06 LONG 089 33 00)

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR., 1972					
03...	1435	--	1020	14	39
28...	1400	.5	1100	18	53
APR.					
06...	1420	--	224	4	2.4
16...	1500	--	2320	13	81
17...	1425	3.5	2300	32	205
17...	1550	--	3400	38	349
17...	1615	--	3600	10	97
17...	1900	--	3500	34	321
17...	2100	--	3650	42	414
17...	2300	--	3850	30	312
18...	0130	--	4100	34	376
18...	0300	--	4250	36	413
18...	0500	--	4350	35	411
18...	0700	--	4550	30	369
18...	0900	1.5	4600	33	410
18...	1100	--	4620	22	274
18...	1355	--	4950	38	508
18...	1600	--	5100	32	441
18...	2000	--	5250	33	468
18...	2030	--	5450	36	530
18...	2200	--	5500	31	460
19...	0100	--	5800	43	673
19...	0300	--	5850	28	442
19...	0500	--	5900	25	398
19...	0700	--	6050	25	408
19...	0900	--	6500	37	649
19...	1000	--	6800	39	716
19...	1100	--	7000	45	850
19...	1200	--	7000	31	586
19...	1300	--	6900	28	522
19...	1400	--	6800	35	643
19...	1445	--	6700	25	452
20...	1050	--	4200	28	318
21...	0900	--	3200	3	26
MAY					
17...	1320	--	184	5	2.5
JULY					
07...	1125	17.0	79	10	2.1
AUG.					
02...	1415	--	190	8	4.1
SEP.					
13...	1045	17.5	146	8	3.2

DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
APR.												
17...	1615	3600	10	97	0	0	4	12	20	28	39	55
18...	1100	4620	22	274	7	19	27	35	42	47	52	63

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .550 MM
APR.	
17...	100
18...	100

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
APR.											
17...	1700	0	0	1	14	26	36	50	67	81	100

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05399500 - BIG EAU PLEINE RIVER NR. STRATFORD, WIS. (LAT 44 49 19 LONG 090 04 46)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT., 1971					
06...	1300	--	82	11	2.4
11...	1050	--	82	8	1.8
25...	0905	--	38	8	.77
NOV.					
09...	1000	--	46	6	.75
11...	1520	--	40	5	.54
15...	0920	--	39	4	.42
FEB., 1972					
17...	1615	--	15	2	.08
MAR.					
17...	1120	.5	227	1	.61
APR.					
12...	0800	--	2480	32	214
12...	1530	1.0	2030	30	164
13...	1045	--	3350	92	832
13...	1205	1.0	3220	62	539
13...	1715	--	3470	66	618
14...	0800	--	3900	44	463
15...	0745	--	4350	32	376
15...	1645	--	5200	86	1210
16...	0740	--	6580	55	977
17...	0800	--	6320	46	785
17...	1310	--	4550	26	319
18...	0800	--	3420	24	222
18...	1130	--	3030	16	131
19...	0800	--	5130	210	2910
24...	1430	--	605	5	8.2
MAY					
01...	0930	--	165	8	3.6
14...	1945	--	44	5	.59
23...	1430	--	19	9	.46
29...	1935	--	20	7	.38
31...	1545	20.5	17	2	.09
JUNE					
05...	1100	--	11	6	.18
12...	1040	--	8.5	16	.37
19...	1455	--	6.6	8	.14
26...	1000	--	6.0	8	.13
27...	1510	--	5.2	30	.42
JULY					
03...	1920	--	13	7	.25
10...	1435	--	12	4	.13
12...	0800	--	110	46	14
12...	1300	--	149	26	10
17...	0810	--	89	8	1.9
23...	1935	--	39	9	.95
31...	0930	--	18	6	.29
AUG.					
06...	2035	--	343	50	46
07...	0740	--	501	34	46
09...	1415	16.0	545	20	29
14...	0845	--	50	12	1.6
15...	1315	--	348	22	21
22...	1950	--	143	7	2.7
26...	0755	--	205	34	19
28...	1000	--	562	14	21
SEP.					
05...	1900	--	34	1	.09
11...	0750	--	23	0	.00
18...	0840	--	49	6	.79
20...	1515	21.0	223	15	9.0
21...	0845	--	336	13	12
25...	0730	--	320	25	22
26...	1245	11.0	12300	79	2620
26...	1600	--	10400	90	2530
27...	0745	--	2900	26	204
27...	1245	--	2100	1	11
28...	1650	--	3110	48	403
29...	0800	--	3180	31	266

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05399500 - BIG EAU PLEINE RIVER NR. STRATFORD, WIS. (LAT 44 49 19 LONG 090 04 46)

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
APR. 18...	1130	3030	16	131	32	38	50	66	80	90	92

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR. 18...	95	100

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
APR. 18...	1045	0	0	1	1	3	5	8	16	33	41	100

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
05400650 - LITTLE PLOVER RIVER AT PLOVER, WIS. (LAT 44 28 26 LONG 089 31 44)					
OCT., 1971 05...	1400	11.0	9.0	4	.10
NOV. 09...	1300	--	10	4	.11
DEC. 14...	1200	--	11	10	.30
JAN., 1972 18...	1200	--	8.6	7	.16
FEB. 14...	1230	--	8.2	5	.11
MAR. 14...	0930	--	8.3	2	.04
APR. 17...	1700	--	27	5	.36
JUNE 21...	0935	10.5	9.2	8	.20
AUG. 02...	1115	11.0	10	10	.27
SEP. 14...	1150	11.0	13	5	.18

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05400650 - LITTLE PLOVER RIVER AT PLOVER, WIS. (LAT 44 28 26 LONG 089 31 44)

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
APR. 17...	1530	141	388	148	0	1	1	2	2

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
APR. 17...	2	4	23	80	100

05401050 - TENMILE CREEK NR. NEKOOSA. WIS. (LAT 44 15 44 LONG 089 48 38)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.. 1971 04...	1050	11.5	50	13	1.8
NOV. 10...	1445	--	64	16	2.8
DEC. 15...	1330	--	92	44	11
JAN.. 1972 20...	0945	--	41	8	.89
FEB. 16...	1000	--	23	8	.50
MAR. 14...	1545	--	29	6	.47
APR. 17...	1530	--	141	388	148
JUNE 27...	0930	--	43	12	1.4
AUG. 03...	1500	18.5	37	8	.80
SEP. 15...	1410	18.0	66	24	4.3
28...	1740	--	221	752	449

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
APR. 17...	1530	141	388	148	2	4	23	80	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05401535 - BIG ROCHE A CRI CREEK NR. ADAMS, WIS. (LAT 44 05 52 LONG 089 46 30)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT., 1971					
04...	1345	12.0	50	4	.54
NOV.					
10...	1045	--	62	6	1.0
DEC.					
15...	1000	--	77	10	2.1
JAN., 1972					
19...	1230	--	50	6	.81
FEB.					
16...	1300	--	40	8	.86
MAR.					
14...	1315	--	52	7	.98
APR.					
17...	1400	--	121	6	2.0
JUNE					
26...	1500	--	51	8	1.1
AUG.					
03...	1150	15.5	44	9	1.1
SEP.					
15...	1100	--	62	6	1.0
28...	1700	11.0	207	10	5.6

DATE	TIME	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
APR.											
17...	1400	121	6	2.0	0	9	19	32	40	49	71

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
APR.		
17...	91	100

05403500 - LEMONWEIR RIVER AT NEW LISBON, WIS. (LAT 43 52 47 LONG 090 09 40)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV., 1971					
17...	1550	--	269	6	4.4
MAR., 1972					
14...	1100	--	207	6	3.4
20...	1700	--	1100	26	77
21...	0700	--	2020	42	229
21...	1700	--	1750	25	118
22...	0700	--	2020	42	229
22...	1700	--	2180	26	153
23...	0700	--	2130	22	127
26...	1900	--	1880	10	51
27...	0700	--	1590	12	52
28...	0700	--	1400	7	26
29...	0700	--	1240	12	40
30...	0700	--	1050	4	11

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05403500 - LEMONWEIR RIVER AT NEW LISBON, WIS. (LAT 43 52 47 LONG 090 09 40)

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
APR.,1972					
06...	0700	--	750	6	12
13...	0700	--	1060	52	149
13...	1445	--	1140	86	265
13...	1700	--	1190	72	231
14...	0700	--	1360	54	198
15...	0700	--	1400	33	125
16...	0700	--	1380	8	30
17...	0700	--	1380	7	26
MAY					
19...	0700	--	333	12	11
24...	1900	--	2130	34	196
25...	1230	20.0	161	6	2.6
25...	1900	--	2090	30	169
26...	0700	--	151	10	4.1
JUNE					
02...	0700	--	153	6	2.5
09...	0700	--	116	5	1.6
16...	0700	--	158	10	4.3
23...	0700	--	120	10	3.2
30...	0700	--	88	5	1.2
JULY					
05...	1515	--	128	6	2.1
07...	0700	--	134	7	2.5
14...	0700	--	145	7	2.7
21...	0700	--	190	8	4.1
28...	0700	--	357	26	25
AUG.					
04...	0700	--	198	15	8.0
11...	0700	--	212	9	5.2
24...	1000	--	839	56	127
25...	0700	--	901	8	19
29...	1800	--	1050	7	20
30...	1800	--	1040	6	17
SEP.					
01...	1800	--	691	6	11
08...	1800	--	220	8	4.8
15...	1800	--	448	10	12
20...	1800	--	1250	14	47
21...	1800	--	1540	10	42
22...	1800	--	1580	5	21
23...	1800	--	1420	4	15
24...	1800	--	1140	4	12
26...	1800	--	2150	18	104
27...	1800	--	3800	40	410
28...	1130	--	4200	24	272
28...	1450	--	5200	28	393
28...	1800	--	5200	22	309
29...	1800	--	4900	10	132
30...	1800	--	3800	8	82

DATE	TIME	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
SEP.											
27...	1315	5340	0	2	16	80	86	87	88	90	100

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05403630 - HULBERT CR. AT WISCONSIN DELLS, WIS. (LAT 43 37 37 LONG 089 49 36)

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
JULY, 1972					
12...	1100	--	3.3	26	.23
AUG.					
24...	1415	--	3.5	12	.11

05406640 - OTTER CREEK NR. HIGHLAND, WIS. (LAT 43 01 40 LONG 090 16 40)

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
DEC., 1971					
21...	--	--	1.5	14	.06
MAR., 1972					
16...	1730	--	24	165	11

DATE	TIME	DISCHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
DEC.											
21...	1100	1.5	34	41	61	77	81	81	82	82	82

DATE	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
DEC.		
21...	83	100

05409830 - NORTH FORK NEDERLO CR. NR. GAYS MILLS, WIS. (LAT 43 21 47 LONG 090 54 34)

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV., 1971					
01...	1220	7.0	.84	4	.01
01...	1320	--	.95	4	.01
01...	1430	--	1.1	3	.01
MAR., 1972					
14...	1010	--	1.2	6	.02
14...	1145	--	1.3	6	.02
14...	1435	--	31	1460	122
14...	1530	--	39	1050	111
14...	1700	--	31	436	36
15...	1430	--	58	1760	276
16...	1413	--	18	192	9.3
17...	1145	--	1.5	7	.03
17...	1300	--	42	1170	133
17...	1347	--	48	771	100

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05409830 - NORTH FORK NEDERLO CR. NR. GAYS MILLS, WIS. (LAT 43 21 47 LONG 090 54 34)

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAR.														
14...	1435	31	1460	122	16	21	26	36	58	74	83	89	97	100

05409860 - SOUTH FORK NEDERLO CR. NR. GAYS MILLS, WIS. (LAT 43 21 36 LONG 090 54 31)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV., 1971					
01...	1200	6.5	1.6	24	.10
01...	1325	--	2.2	8	.05
01...	1430	7.0	2.8	28	.21
MAR., 1972					
14...	1035	--	2.9	14	.11
14...	1200	--	3.6	47	.46
14...	1445	--	49	1550	205
14...	1455	--	49	1660	220
14...	1520	--	66	2640	470
14...	1715	--	84	1720	390
15...	1500	--	105	2020	573
16...	1337	--	27	205	15
16...	1725	--	50	101	14
17...	1200	--	6.8	136	2.5
17...	1310	--	70	1590	301
17...	1400	--	106	3120	893
SEP.					
13...	0940	--	1.1	14	.04

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAR.														
14...	1445	49	1550	205	15	21	25	36	51	83	92	98	100	--
17...	1310	70	1590	301	15	20	25	35	58	78	89	95	99	100

WISCONSIN RIVER BASIN--Continued

05409890 - NEDERLO CR. NR. GAYS MILLS, WIS. (LAT 43 21 43 LONG 090 52 44)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV., 1971					
01...	1200	--	4.8	12	.16
01...	1335	--	5.6	20	.30
01...	1515	6.5	6.5	47	.82
MAR., 1972					
14...	0940	--	6.8	30	.55
14...	1310	--	10	87	2.3
14...	1550	--	162	3950	1730
14...	1620	--	175	4140	1960
14...	1820	--	155	1870	783
15...	1315	--	11	56	1.7
16...	1600	--	111	1120	336
17...	1045	--	53	16	2.3
17...	1525	--	228	3100	1910
SEP.					
11...	1020	--	4.2	12	.14
13...	0915	--	5.1	114	1.6
13...	1050	--	4.9	68	.90
13...	1315	--	4.6	44	.55

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
MAR.											
14...	1550	162	3950	1730	14	19	24	35	55	80	90
17...	1525	228	3100	1910	15	20	25	34	55	77	85

	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
MAR.		
14...	97	100
17...	95	100

DATE	TIME	DIS-CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
MAR.											
17...	1520	220	2	4	9	56	86	92	96	97	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

WISCONSIN RIVER BASIN--Continued

05410000 - KICKAPOO RIVER AT GAYS MILLS, WIS. (LAT 43 19 10 LONG 090 51 00)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT., 1971					
07...	1430	--	242	48	31
NOV.					
01...	1400	--	339	12	11
10...	1600	--	296	20	16
FEB., 1972					
23...	1530	--	272	10	7.3
MAR.					
14...	1330	--	780	228	480
14...	1840	--	1180	644	2050
17...	1330	--	1660	478	2140
JULY					
07...	1300	--	246	24	16
SEP.					
09...	1330	35.0	215	438	254

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
MAR.											
14...	1840	1180	644	2050	17	23	28	39	66	90	97

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
MAR.	
14...	100

05410500 - KICKAPOO RIVER AT STEUBEN, WIS. (LAT 43 11 27 LONG 090 52 28)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC., 1971					
01...	1430	--	382	22	23
FEB., 1972					
23...	1630	--	417	3	3.4
MAR.					
17...	1500	--	2250	182	1110
APR.					
25...	1115	--	681	166	305

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SEDIMENT ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

GRANT RIVER BASIN

05413500 - GRANT RIVER AT HURTON, WIS. (LAT 42 43 13 LONG 090 49 09)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC., 1971					
16...	1130	--	301	624	507
MAR., 1972					
06...	1345	.0	88	134	32
12...	1730	--	1270	905	3100
13...	0825	--	2000	807	4360
13...	1015	--	1750	802	3790
APR.					
11...	1215	--	125	84	28
MAY					
18...	1130	19.0	146	100	39
JUNE					
26...	1140	20.5	94	217	55
SEP.					
18...	1300	.5	238	212	136

ROCK RIVER BASIN

05424000 - E. BR. ROCK R. NR. MAYVILLE, WIS. (LAT 43 31 46 LONG 088 34 00)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAY , 1972					
11...	0910	14.0	155	4	1.7
JUNE					
07...	1100	--	61	5	.82
JULY					
14...	1230	--	31	6	.50
AUG.					
29...	1110	--	217	15	8.8

05431500 - TURTLE CR. NR. CLINTON, WIS. (LAT 42 35 47 LONG 088 51 50)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAY , 1972					
19...	1225	19.0	134	64	23
AUG.					
08...	1520	--	295	128	102
SEP.					
26...	1350	18.5	405	64	70

05432500 - PECATONICA RIVER AT DARLINGTON, WIS. (LAT 42 40 48 LONG 090 07 07)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC., 1971					
21...	1410	--	130	46	16
FEB., 1972					
02...	1000	--	75	9	1.8
MAR.					
16...	1500	--	1680	443	2010
APR.					
24...	1325	8.0	227	86	53
MAY					
19...	1325	22.0	123	115	38
JUNE					
27...	1220	21.5	69	102	19
AUG.					
10...	1250	--	105	114	32
SEP.					
21...	1030	--	177	114	54

ILLINOIS RIVER BASIN

05543830 - FOX RIVER AT WAUKESHA, WIS. (LAT 43 00 17 LONG 088 14 37)

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
APR., 1972					
06...	1550	--	156	4	1.7
MAY					
24...	1430	--	10	14	.39
JUNE					
01...	1700	--	68	20	3.7
JULY					
10...	1455	--	43	4	.46
AUG.					
01...	1145	--	76	14	2.9
SEP.					
21...	1920	--	974	41	108
22...	1035	16.0	1010	34	93
27...	--	15.5	509	8	11

INDEX

Page

Acre-foot, definition of........................ 3

Bed material, definition of..................... 3
Biochemical oxygen demand, definition of....... 3

Cfs-day, definition of.......................... 3
Chemical oxygen demand, definition of.......... 3
Coliform organisms, definition of.............. 3
Contents, definition of......................... 3
Control, definition of.......................... 3
Cooperation..................................... 2
Cubic feet per second per square mile,
    definition of............................... 3
Cubic foot per second, definition of........... 4

Discharge, definition of........................ 4
Drainage area, definition of.................... 4

Gage height, definition of...................... 4
Gaging station, definition of................... 4

Hardness, definition of......................... 4
Hydrologic bench-mark station, definition of... 9
Hydrologic conditions........................... 25
  graphs of..................................... 26-28

Introduction.................................... 1

Map of Wisconsin, gaging stations............... 24
Methylene blue active substance,
    definition of............................... 4
Micrograms per liter, definition of............ 4
Milligrams per liter, definition of............ 5

Page

Partial-record station, definition of.......... 5
Particle size, definition of.................... 5
Picocurie, definition of........................ 7

References...................................... 20-22
Runoff in inches, definition of................ 7

Sediment, definition of......................... 7
Sodium adsorption ratio, definition of......... 7
Solute, definition of........................... 7
Special networks and programs................... 9
Specific conductance, definition of............ 8
Stage-discharge relation, definition of........ 8
Station number, definition of.................. 9
Surface-water data, collection and
    computation of.............................. 10-14
  accuracy of................................... 15
  other available............................... 16
  publication................................... 15

Thermograph, defintion of....................... 8
Tons per acre-foot, definition of.............. 8
Tons per day, definition of..................... 8

Water-quality data, collection and
    examination of.............................. 16-19
  publication................................... 19,20
  sediment...................................... 19
  solutes....................................... 18
  temperature................................... 19
WRD, definition of.............................. 8
WSP, definition of.............................. 8

Water Records

Alder Creek near Upson.......................... 33
Allen Creek (tributary to Brule River)
    tributary near Alvin........................ 162
Allen Creek (tributary to Rock River) near
    Fort Atkinson............................... 170
Amnicon River near Poplar....................... 155
Anvil Lake near Eagle River..................... 28,97
Apple Creek (tributary to Fox River) near
    Kaukauna.................................... 164
Apple Creek (tributary to Potato River)
    near Upson.................................. 162
Arkansaw Creek tributary near Arkansaw......... 166
Armstrong Creek near Armstrong Creek........... 163
Ashwaubenon Creek near DePere.................. 157

Bad Axe River, North Fork near Genoa........... 167
Bad River near Odanah........................... 34
Bad River, at Mellen............................ 155
  near Mellen................................... 32
Baraboo River near Baraboo...................... 119
Bashaw Brook near Shell Lake.................... 165
Bean Brook near Spring Brook.................... 159
Bear Branch near Platteville.................... 169
Bear Creek near Sugar Bush...................... 157
  at Stephensville.............................. 158
Bear River near Powell.......................... 165
Bearskin Creek near Harshaw..................... 161,168
Beaver Creek, South Branch near Beaver
    (tributary to Peshtigo River)............... 156
  tributary near Sparta (tributary to
    La Crosse River)............................ 167
Big Eau Pleine Reservoir, contents of.......... 130-131
Big Eau Pleine River near Stratford............ 105
Big Roche a Cri Creek near Adams............... 112
Big St. Germain Lake, contents of.............. 129,131
Big Sandy Creek near Wausau..................... 168
Bird Creek at Wautoma........................... 163
Black Creek at Black Creek...................... 158
Black Earth Creek at Black Earth............... 121
Black River (tributary to Lake Superior)
    near Bessemer, Mich......................... 36
Black River (tributary to Lake Superior)
    near Chaffey................................ 155
Black River (tributary to Mississippi River),
    at Neillsville.............................. 94
    near Galesville............................. 95
  tributary near Whittlesey..................... 167
Black River basin, crest-stage partial-
    record stations in.......................... 167
  discharge measurements at miscellaneous
    sites in.................................... 172
  gaging station records in..................... 94-95
  water-quality records in...................... 231
Bois Brule River at Brule....................... 30
Boomer Creek near Saxon......................... 156,162
Branch River near Cato.......................... 159
Brule Creek at Alvin............................ 158
Brule River near Florence....................... 39
Buckatabon Lake, contents of.................... 129-130
Buffalo River tributary near Osseo............. 166
Burnt Rollways Reservoir, contents of.......... 129-130
By Golly Creek near Nelson...................... 166

Camp Eight Creek near Cavour.................... 156
Castle Rock Flowage, contents of............... 130-131
Cawley Creek near Neillsville................... 167
Cedar Lake near Kiel............................ 27,60
Chases Brook near Danbury....................... 160
Chippanazie Creek at Stanberry................. 159
Chippewa River, at Bishops Bridge, near
    Winter...................................... 77
  at Chippewa Falls............................. 84
  at Durand..................................... 89
  East Fork, near Glidden....................... 160
  near Bruce.................................... 78
Chippewa River basin, crest-stage partial-
    record stations in.......................... 165-166
  discharge measurements at miscellaneous
    sites in.................................... 171-172
  gaging station records in..................... 77-90
  low-flow partial-record stations in.......... 160
  reservoirs in................................. 91

Water Records--Continued

Page
Chippewa River basin, sediment records in...... 245-246
  water-quality records in.................... 229-230
Cisco Branch Ontonagon River at Cisco Lake Outlet, Mich........................ 38
Cole Creek near Dunbar........................ 163
Copper Creek basin, discharge measurements at miscellaneous sites in................ 172
  low-flow partial-record station in.......... 160
Copper Creek near Mt. Sterling................ 160
Crawfish River at Milford..................... 135
Crooked Creek near Boscobel................... 169

Deerskin Lake, contents of.................... 129-130
Deerskin River near Eagle River............... 161
Dell Creek near Lake Delton................... 116,168
Des Plaines River at Russell, Ill............. 150
Devil Creek near Merrill...................... 168
Devils Lake near Baraboo...................... 27,118
Douglas Creek near Prentice................... 165
Du Charme Creek at Eastman.................... 167
Duncan Creek at Bloomer....................... 166

Eagle Creek near Athelstene................... 156
Eagle Creek (tributary to Waumandee Creek) near Fountain City....................... 166
East River, near DePere....................... 157
  tributary at Greenleaf...................... 164
East Twin River at Mishicot................... 159
Eau Claire River (tributary to Chippewa River) near Fall Creek.................. 166
Eau Claire River (tributary to Wisconsin River) at Kelly.......................... 103
Eau Galle River, at Spring Valley............. 90
  tributary near Hersey....................... 166
Elk River near Phillips....................... 160
Embarrass River near Embarrass................ 54
Emmons Creek near Rural....................... 56
Evergreen Creek near Langlade................. 52

Fish Lake near Sauk City...................... 120
Flag River near Port Wing..................... 155
Flambeau Flowage, contents of................. 91
Flambeau River, at Babbs Island, near Winter...................................... 80
  near Bruce.................................. 82
  South Fork, near Phillips................... 81
  South Fork tributary, near Park Falls....... 165
  tributary at Ladysmith...................... 165
Fond du Lac River, East Branch near Fond du Lac.............................. 157
  East Branch tributary, near Eden............ 164
  West Branch near Fond du Lac................ 157
Fourmile Creek near Three Lakes............... 167
Fourteenmile Creek near New Rome.............. 111
Fox River (tributary to Lake Michigan), at Berlin................................... 50
  at Rapide Croche Dam, near Wrightstown...... 58
Fox River (tributary to Illinois River) at Waukesha................................. 151
  at Wilmot................................... 154
French Creek near Ettrick..................... 167
Frog Creek near Minong........................ 159

Galena River at Buncombe...................... 134
Galena River basin, crest-stage partial-record stations in....................... 169
  gaging-station records in................... 134
  water-quality records in.................... 234
Gill Creek near Brooklyn...................... 170
Goggle-eye Creek near Thorp................... 166
Grand River near Kingston..................... 49
Grant River at Burton......................... 132
Grant River basin, crest-stage partial-record stations in....................... 169
  gaging-station records in................... 132
  sediment records in......................... 250
  water-quality records in.................... 234
Gudegast Creek, near Rhinelander.............. 161
  near Starks................................. 167

Hay Creek (tributary to Chippew River) near Hayward.............................. 160
Hay Creek (tributary to South Fork Jump River) near Prentice...................... 165
Hay River at Wheeler.......................... 87
Hibbard Creek at Jacksonport.................. 157
Hills Pond Creek near Langlade................ 157
Honey Creek (tributary to Menomonee River) at Milwaukee............................. 164
Hulbert Creek near Wisconsin Dells............ 115
Hunting River near Elcho...................... 163

Illinois River basin, crest-stage partial-record stations in....................... 150-170
  discharge measurements at miscellaneous sites in................................. 175
  gaging station records in................... 154
  sediment records in......................... 258
  water-quality records in.................... 235

Jump River, at Sheldon........................ 26,83
  North Fork, near Phillips................... 165

Kelly Brook near Lena......................... 157
Kenyon Creek near Radisson.................... 165
Kewaunee River near Kewaunee.................. 59
Kickapoo River, at Gays Mills................. 127
  at Lafarge..............................124,204-211
  near Lafarge................................ 203
  near Rockton................................ 197-202
  at Steuben.................................. 128
Killsnake River near Chilton.................. 158
Kinnickinnic River tributary at River Falls... 165

La Crosse River basin, crest-stage partial-record stations in....................... 167
Lac Vieux Desert, contents of................. 129-130
Lake Chippewa, contents of.................... 91
Lake Dubay, contents of....................... 130-131
Lake Mendota at Madison....................... 136
Lake Michigan at Milwaukee.................... 190-194
Lake Michigan, streams tributary to, crest-stage partial-record stations in........ 162-164
  discharge measurements at miscellaneous sites in................................. 171
  gaging-station records in................... 39-72
  low-flow investigations in.................. 176-181
  low-flow partial-record stations in......... 156-159
  sediment records in......................... 239-245
  water-quality records in............219-221,225-228
Lake Monona at Madison........................ 137
Lake Nokomis, contents of..................... 130-131
Lake Superior, streams tributary to, crest-stage partial-record stations in........ 162
  gaging-station records in................... 30-38
  low-flow investigations in.................. 176
  low-flow partial-record stations in......... 155-156
  sediment records in......................... 236-238
  water-quality records in.................... 225
Lake Wingra Outlet at Madison................. 140-141
Lake Winnebago at Oshkosh..................... 57
Lake Wissota, contents of..................... 91
Lakes and reservoirs:
  Anvil Lake near Eagle River................. 28,97
  Big Eau Pleine Reservoir.................... 130-131
  Big St. Germain Lake........................ 129,131
  Buckatabon Lake............................. 129-130
  Burnt Rollways Reservoir.................... 129-130
  Castle Rock Flowage......................... 130-131
  Cedar Lake near Kiel........................ 27,60
  Chippewa, Lake.............................. 91
  Deerskin Lake............................... 129-130
  Devils Lake near Baraboo.................... 27,118
  Dubay, Lake................................. 130-131
  Fish Lake near Sauk City.................... 120
  Flambeau Flowage............................ 91
  Lac Vieux Desert............................ 129-130
  Little St. Germain Lake..................... 129,131
  Long Lake near Iron River................... 31
  Long Lake on Deerskin River................. 129-130
  Lower Ninemile Lake......................... 129-130
  Mendota, Lake, at Madison................... 136
  Minocqua Lake............................... 130-131
  Monona, Lake, at Madison.................... 137

Water Records--Continued

Page
Lakes and reservoirs:
  Moose Lake.................................. 91
  Nokomis, Lake.................................. 130-131
  North Lake near Elkhorn.................................. 27,152
  North Pelican Lakes.................................. 130-131
  Petenwell Flowage.................................. 130-131
  Pickerel Lake.................................. 129,131
  Rainbow Lake.................................. 129,131
  Rest Lake.................................. 91
  Rockland Lake near Burlington.................................. 153
  Sevenmile Lake.................................. 129-130
  Shell Lake at Shell Lake.................................. 28,74
  South Pelican Lake.................................. 129,131
  Spirit River Flowage.................................. 130-131
  Squirrel Lake.................................. 130-131
  Sugar Camp Reservoir.................................. 129,131
  Twin Lakes.................................. 129-130
  Wheeler Lake near Lakewood.................................. 28,46
  Willow Reservoir.................................. 130-131
  Winnebago, Lake, at Oshkosh.................................. 57
  Wissota, Lake.................................. 91
Lawrence Creek near Westfield.................................. 48
Layman Creek near Hurley.................................. 156
Lemonweir River at New Lisbon.................................. 114
Lightning Creek at Almena.................................. 166
Lily River near Lily.................................. 163
Little Frog Creek near Minong.................................. 159,164
Little La Crosse River near Leon.................................. 167
Little Menomonee River near Freistadt.................................. 164
Little Peshtigo River near Coleman.................................. 157
Little Pine Creek, near Irma.................................. 168
  near Tomahawk.................................. 161
Little Plover River, at Plover.................................. 107
  near Arnott.................................. 106
Little Popple River near Aurora.................................. 163
Little Rice River near Bradley.................................. 161
Little River, North Branch, near Coleman.................................. 163
Little St. Germain Lake, contents of.................................. 129,131
Little Trimbelle Creek near Bay City.................................. 165
Little Turtle Creek at Allens Grove.................................. 161,170
Little West Branch near Neopit.................................. 157
Little Wolf River at Galloway.................................. 157
Lloyd Creek near Doering.................................. 168
Long Lake (tributary to Lake Superior), near
    Iron River.................................. 31
Long Lake (Wisconsin River basin), contents
    of.................................. 129-130
Lost Creek near Powell.................................. 160
Lower Ninemile Lake, contents of.................................. 129-130
Lower Ox Creek near Gordon.................................. 159

Manitou Way Storm Sewer at Madison.................................. 138
Manitowoc River, South Branch near Chilton.................................. 158
Marengo River near Marengo.................................. 156
McCall Creek at Wausaukee.................................. 163
Menominee River, below Koss, Mich.................................. 44
  near Florence.................................. 40
  near McAllister.................................. 163
  near Pembine.................................. 43
Menomonee River at Wauwatosa.................................. 67
Mill Creek near Pella.................................. 157
Middle River near Poplar.................................. 155
Milwaukee River, at Kewaskum.................................. 62
  at Milwaukee.................................. 66
  at Waubeka.................................. 65
  East Branch, near New Fane.................................. 63
  North Branch, near Fillmore.................................. 64
  tributary at Fredonia.................................. 164
Minocqua Lake, contents of.................................. 130-131
Mishonagon Creek near Woodruff.................................. 161,168
Mississippi River at McGregor, Iowa.................................. 96
Monico Creek at Monico.................................. 161
Montagne Creek near Florence.................................. 156
Moose Lake, contents of.................................. 91
Moose River (tributary to Chippewa River)
    near Clam Lake.................................. 160
Moose River (tributary to St. Croix River)
    near Solon Springs.................................. 159
Mormon Creek near La Crosse.................................. 167
Morris Creek tributary near Norwalk.................................. 169
Mud Creek (tributary to Wolf River) near
    Nashville.................................. 163

Page
Mud Creek (tributary to Manitowoc River)
    near Reedsville.................................. 159
Mukwonago River tributary near Mukwonago.................................. 170
Muskrat Creek at Conover.................................. 160,167

Nakoma Storm Sewer at Madison.................................. 139
Narrows Creek at Loganville.................................. 168
Nederlo Creek, near Gays Mills..................................126,212-216
  North Fork, near Gays Mills.................................. 125
Neshota River tributary near Denmark.................................. 164
New Wood River near Merrill.................................. 168
Nippersink Creek, North Branch tributary
    near Genoa City.................................. 170
Noisy Creek near Rhinelander.................................. 161
North Fish Creek near Ashland.................................. 155
North Fork Thunder River near Lakewood.................................. 156
North Lake near Elkhorn.................................. 27,152
North Pelican Lakes, contents of.................................. 130-131

Oak Creek, at South Milwaukee.................................. 68
  near South Milwaukee.................................. 164
Oconto River, near Gillett.................................. 26,47
  North Branch near Mountain.................................. 157
  North Branch, near Wabeno.................................. 163
One Mile Creek near Mauston.................................. 168
Onion River near Waldo.................................. 159
Ontonagon River, Cisco Branch at Cisco
    Lake Outlet, Mich.................................. 38
Otter Creek (tributary to Wisconsin River)
    near Highland.................................. 122
Ounce River near Gordon.................................. 159

Pats Creek near Elk Grove.................................. 169
Pearl Creek at Grandview.................................. 156,162
Pearson Creek near Maple.................................. 162
Pecatonica River, at Darlington.................................. 145
  at Martintown.................................. 147
  East Branch, near Blanchardville.................................. 146
Pecore Creek near Hayes.................................. 157
Pensaukee River near Pulaski.................................. 158,163
Peshtigo River, at Peshtigo.................................. 45
  near Cavour.................................. 163
  North Branch, near Argonne.................................. 156
Pet Brook tributary near Edgar.................................. 168
Petenwell Flowage, contents of.................................. 130-131
Pickerel Lake, contents of.................................. 129,131
Pigeon Creek near Lancaster.................................. 169
  North Branch; near Marion.................................. 158
Pigeon River near Millersville.................................. 159
Pike Creek near Kenosha.................................. 164
Pike River near Racine.................................. 72
Pine Creek (tributary to Flambeau River)
    near Oxbo.................................. 79
Pine Creek (tributary to Red Cedar River),
    East Branch tributary, near Dallas.................................. 166
Pine River (tributary to Menominee River),
    below Pine River powerplant, near
    Florence.................................. 42
  near Three Lakes.................................. 158
  North Branch at Windsor Dam near Alvin.................................. 162
Platte River near Rockville.................................. 133
Platte River basin, crest-stage partial-
    record stations in.................................. 169
  gaging station records in.................................. 133
  water-quality records in.................................. 234
Poplar River near Owen.................................. 167
Popple River, near Fence..................................41,184-189
  South Branch, near Fence.................................. 156
    near Newald.................................. 162
Potato River near Gurney.................................. 156
Prairie River near Merrill.................................. 101
Presque Isle River at Marenisco, Mich.................................. 37
Price Creek near Phillips.................................. 165

Raccoon Creek, East Fork tributary, near
    Beloit.................................. 170
Rainbow Lake, contents of.................................. 129,131
Randall Creek tributary near Abbotsford.................................. 168
Rat River near Wabeno.................................. 156
Red Cedar River, at Menomonie.................................. 88
  near Cameron.................................. 85,86
  near Colfax.................................. 166

Water Records--Continued

Page
Reefer Creek near Port Wing.......... 155
Rest Lake, contents of.......... 91
Reservoirs - see Lakes and reservoirs
Richland Creek near Plugtown.......... 169
Robbins Creek near Columbus.......... 169
Rock Branch near Mineral Point.......... 170
Rockland Lake near Burlington.......... 153
Rock River, at Afton..........143,217-218
  at Rockton, Ill.......... 149
  East Branch tributary, near Slinger.......... 169
  South Branch tributary, near Waupun.......... 169
  tributary near Watertown.......... 169
  West Branch, near Waupun.......... 169
Rock River basin, crest-stage partial-record stations in.......... 169-170
  discharge measurements at miscellaneous sites in.......... 173-175
  gaging-station records in.......... 135-149
  low-flow partial-record stations in.......... 161
  sediment records in.......... 258
  water-quality records in.......... 234-235
Rocky Branch near Richland Center.......... 169
Rocky Run Creek near Goodnow.......... 161
Root River, at Racine.......... 71
  Canal near Franklin.......... 70
  near Franklin.......... 69
Root River, West Branch Canal tributary near North Cape.......... 164
Rowan Creek at Poynette.......... 169

St. Croix River, at St. Croix Falls.......... 76
  near Danbury.......... 73
St. Croix River basin, crest-stage partial-record stations in.......... 164-165
  discharge measurements at miscellaneous sites in.......... 171
  gaging-station records in.......... 73-76
  low-flow partial-record stations in.......... 159-160
  water-quality records in.......... 229
Sand River, near Red Cliff.......... 155
  tributary near Red Cliff.......... 162
Sawyer Creek (tributary to Fox River) at Oshkosh.......... 164
Sawyer Creek (tributary to Yellow River) near Shell Lake.......... 164
Scuppernong Creek near Wales.......... 170
Seth Creek near Cadott.......... 166
Sevenmile Lake, contents of.......... 129-130
Sheboygan River, at Sheboygan.......... 61
  tributary near Plymouth.......... 164
Shell Lake at Shell Lake.......... 28,74
Silver Creek near Algoma.......... 159
Sioux River near Washburn.......... 155,162
Skanawan Creek near Tomahawk.......... 168
Skinner Creek tributary near Monroe.......... 170
Smith Creek near Park Falls.......... 165
Snake River near Pine City, Minn.......... 75
Somo River near Tripoli.......... 161
South Branch Pemebowon River near Pembine.......... 156
South Branch Pike River near Dunbar.......... 156
South Pelican Lake, contents of.......... 129,131
Spaulding Creek near Big Falls.......... 163
Spillerberg Creek near Cayuga.......... 155,162
Spirit River at Spirit Falls.......... 100
Spirit River Flowage, contents of.......... 130-131
Spring Creek near Durand.......... 166
Springstead Creek near Park Falls.......... 160
Squaw Creek near Harrison.......... 167
Squirrel Lake, contents of.......... 130-131
Stony Brook near Superior.......... 162
Stony Creek near Algoma.......... 159
Stuntz Brook near Minong.......... 159
Suamico River at Suamico.......... 157
Sugar Camp Reservoir, contents of.......... 129,131
Sugar Creek at Elkhorn.......... 170

Page
Sugar Creek basin, discharge measurements at miscellaneous sites in.......... 172
Sugar River, near Brodhead.......... 26,148
  tributary near Pine Bluff.......... 170

Tenmile Creek near Nekoosa.......... 110
  ditch 5 near Bancroft..........109,195-196
Token Creek near Madison.......... 170
Tomahawk River at Bradley.......... 99
Trade River near Frederic.......... 165
Trappe River tributary near Merrill.......... 168
Trempealeau River, at Arcadia.......... 92
  at Dodge.......... 93
Trempealeau River basin, gaging-station records in.......... 92-93
  sediment records in.......... 247
  water-quality records in.......... 230
Trout Brook, near Highbridge.......... 156
  tributary near Marengo.......... 162
Trout Creek near Peshtigo.......... 158
Turtle Creek near Clinton.......... 144
Twin Lakes, contents of.......... 129-130
Tyler Forks River near Upson.......... 155

Waupaca River, near Waupaca.......... 158
  tributary near Waupaca.......... 163
Waupee River near Mountain.......... 157
Weber Creek near Mercer.......... 165
Webster Creek at New Lisbon.......... 168
Wheeler Lake near Lakewood.......... 28,46
West Twin River near Francis Creek.......... 159
White River (tributary to Bad River) near Ashland.......... 35
White River (tributary to Illinois Fox River) near Burlington.......... 170
  tributary near Burlington.......... 170
Willow Creek (tributary to Lowe Creek) near Eau Claire.......... 166
Willow Reservoir, contents of.......... 130-131
Willow River (tributary to Wisconsin River) near Hazelhurst.......... 161
  tributary near New Richmond.......... 165
Wisconsin River, at Merrill.......... 102
  at Muscoda.......... 123
  at Rainbow Lake, near Lake Tomahawk.......... 98
  at Rothschild.......... 104
  at Wisconsin Rapids.......... 106
  near Wisconsin Dells.......... 117
  tributary at Wisconsin Dells.......... 168
Wisconsin River basin, crest-stage partial-record stations in.......... 167-169
  discharge measurements at miscellaneous sites in.......... 173
  gaging-station records in.......... 97-128
  low-flow partial-record stations in.......... 160-161
  reservoirs in.......... 129-131
  sediment records in.......... 247-257
  water-quality records in..........219-224,231-233
Wolf Creek near St. Croix Falls.......... 160
Wolf River, at Langlade.......... 51
  at Keshena Falls.......... 53
  at New London.......... 55
Woods Creek near Fence.......... 163
Wood River, near Siren.......... 160
  North Fork, near Grantsburg.......... 160

Yahara River near McFarland.......... 142
Yellow River (tributary to Chippewa River) at Cadott.......... 166
Yellow River (tributary to St. Croix River) at Webster.......... 160
Yellow River (tributary to Wisconsin River), at Babcock.......... 113
  tributary near Pittsville.......... 168
Yellowstone River near Blanchardville.......... 170

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